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Memory and Recollection in the Aristotelian Tradition

Essays on the Reception of Aristotle's De memoria et reminiscentia

Edited by
VÉRONIQUE DECAIX
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Preface

This volume is devoted to the medieval reception of Aristotle's *De memoria et reminiscentia*. It owes its genesis to a workshop organised in 2015 at the University of Gothenburg as one in a series of meetings within the research programme *Representation and Reality: Historical and Contemporary Perspectives on the Aristotelian Tradition*, funded by the Riksbankens jubileumsfond and lead by Christina Thomsen Thörnqvist 2013–2019.[1] The main task of the programme has been to study Aristotle's theories on perception and cognition with a specific focus on the Byzantine Greek, Medieval Latin and Arabic traditions on Aristotle's *De sensu et sensato* and his treatises on sleep and dreams — *De somno et vigilia*, *De insomniis* and *De divinatione per somnum* — together with related passages in *De anima*. For example, an inventory of medieval Latin question commentaries on *De sensu et sensato, De memoria et reminiscentia* and the works on sleep and dreams (which in the Latin West usually circulated as one work under the title *De somno et vigilia*) was published by Sten Ebbesen and the editors of this volume in 2015.[2] In addition, the work of the programme's text editing group has resulted in a number of new critical editions of Latin commentaries on the three Aristotelian works mentioned. These include Sten Ebbesen's editions of the question commentaries on *De memoria et reminiscentia* by Radulphus Brito,[3] Anonymus Vaticani 3061,[4] Anonymus Orielensis 33,[5] and Anonymus Parisini 16160.[6] While Aristotle's theories on memory have not been the main target of *Representation and Reality*, the intimate connection between *De memoria et reminiscentia* and the other Aristotelian works mentioned, both in content and in transmission, has made

1 For a presentation of the programme, see Sten Ebbesen and Christina Thomsen Thörnqvist, "Representation and Reality: The Greek, Latin and Arabic Reception of Aristotle's Theories on Sense-Perception and Concept-Formation," *Bulletin de Philosophie Médiévale*, 55 (2014), pp. 355–59.

2 Sten Ebbesen, Christina Thomsen Thörnqvist and Véronique Decaix, "Questions on *De sensu et sensato*, *De memoria* and *De somno et vigilia*. A Catalogue," *Bulletin de Philosophie Médiévale*, 57 (2015), pp. 59–115.

3 Sten Ebbesen, "Radulphus Brito on Memory and Dreams. An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 86 (2016), pp. 24–50.

4 Sten Ebbesen, "Anonymus Vaticani 3061 and Anonymus Vaticani 2170 on Aristotle's *Parva naturalia*. An Edition of Selected Questions," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 86 (2016), pp. 244–75.

5 Sten Ebbesen, "Anonymus Orielensis 33 on *De memoria*. An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 85 (2016), pp. 128–61.

6 Sten Ebbesen, "Anonymus Parisini 16160 on Memory. An edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 85 (2016), pp. 162–217.

it relevant to include Aristotle's theories on memory in the programme's activities and publications.

This volume has also been shaped by Véronique Decaix's move in 2015 from the *Representation and Reality* group to the Université Paris 1 Panthéon-Sorbonne. While some of the essays here included were presented within the framework of *Representation and Reality*, others were first talks given at research seminars organised by Decaix at the Université Paris 1 Panthéon-Sorbonne in collaboration with Pierre-Marie Morel, Laurent Lavaud and Jean-Baptiste Brenet as part of the project *Memoria*: *Ancient and Medieval Theories of Memory,* funded by the university and conducted by Decaix. Some of the papers were also presented at a session organised by Decaix at the International Medieval Congress at the University of Leeds in July 2018. A *habilitation* and monograph on the topic is currently under preparation by Decaix.

The overall aim of the present collection is to highlight a selection of central topics in the medieval reception of Aristotle's theories on memory and recollection and to do so across the three major linguistic traditions that were the main carriers of this development. No ancient commentary on Aristotle's *De memoria* has come down to us; the ancient development is here represented by a contribution on Aristotle himself (Mika Perälä) and one on Neoplatonic theories (Alexandra Michalewski). The remaining essays span the Latin medieval reception (Julie Brumberg-Chaumont, Véronique Decaix, Sten Ebbesen and Christina Thomsen Thörnqvist), the Arabic tradition (Tommaso Alpina, Carla di Martino and Joël Chandelier) and the Byzantine (Dafni Argyri). The reader will find, however, that from a thematical point of view, the chapters cluster across the linguistic traditions.

Michalewski's contribution is unique in two ways: In treating the Neoplatonic tradition, it serves as a contrast to the other contributions, all of which treat various aspects of the Aristotelian tradition. It is also the only chapter specifically targeting the concept of recollection; the chapter analyses the concept of *anamnesis* in Plotinus and demonstrates how in Plotinus, recollection, in contrast to memory, begins and ends as an interior process, in which external sense impressions are means by which intelligible content that is innate to the soul and so already present in it is actualised.

More than half of the contributions to this volume deal in one way or another with the nature of the object of memory. To begin with the Stagirite himself, it has been claimed that Aristotle in his conclusion of *De memoria* appears to follow up on only two of the three questions that he purports to answer in the introduction of the work, and so leaves the question why memory comes about unanswered. Perälä argues in opposition to this observation that Aristotle in fact does provide an answer by specifying the particular type of *phantasma* that is required for memory. The question of the proper characterisation of the memory-*phantasma* is also the topic of Decaix's chapter, which maps out Albert the Great's distinction between the functions of imagination and memory. Decaix argues that according to Albert the *phantasma* used by imagination and the memory-*phantasma* are fundamentally different, the latter being composed of both the image of the object perceived and its *intentio*. Ebbesen's chapter offers an account of how the Latin commentators understood and explained Aristotle's claim that the object of memory is the past, the subsequent problems this interpretation gave rise to and how these problems

were solved. In the commentators analysed by Ebbesen, as in Albert, the composite nature of memory is an important element in the theory on memory formation; some commentators, following Avicenna, claim that the sensible species from the object is stored in imagination whereas the intention that is received with the species is stored in memory.

Continuing the discussion of the object of memory, Carla di Martino's contribution provides an analysis of Averroes' theory on the object of memory and his use of *ma'nâ*, the Arabic word that was translated with the Latin *intentio*, for designating the object of memory. Di Martino demonstrates that Averroes, in his paraphrase of Aristotle's *Peri hermeneias*, uses *ma'nâ* in the sense of signification. According to di Martino, this explains Averroes' claim that, whereas both animals and human beings have memory, only human beings are capable of recollection. Julie Brumberg-Chaumont charts the development of a debate in the earliest English commentaries on *De memoria* over the location of the treatise in the Aristotelian corpus; more precisely, the debate was over whether memory is primarily a moving faculty, making the *De memoria* belong to the last part of *De anima,* or rather belongs more closely to sense perception, which suggest a location of *De memoria* to after *De sensu et sensato*. The question of the object of memory also plays an important role in this debate.

Medieval theories of the nature, function and mechanisms of memory were firmly linked to the theory of the internal senses and their mutual relations, which is one of the major contributions of the Arabic and Latin traditions to medieval psychology. Particular aspects of the relation between the theory of the internal senses and accounts of memory in the Arabic and Latin traditions are discussed in Alpina, Chandelier and Thomsen Thörnqvist's chapters. Chandelier shows how Avicenna's doctrine of the five internal senses and in particular his philosophically rooted theory that memories are stored in two places — the sensible species in imagination and intentions in memory (cf. on Ebbesen's chapter above), each located in a different part of the brain — caused difficulties that commentators in the Western medical tradition tried to solve in various ways. Alpina presents Avicenna's theory of memory and recollection against the backdrop of his theory of the five internal senses and of the process of internal perception. His chapter elaborates further on the division of the function of storage between imagery and memory and provides a detailed survey of Avicenna's distinction between memory and recollection. A particular aspect of the interrelation of perception, imagination and memory is treated in Thomsen Thörnqvist's chapter, which examines how Latin commentators from Albert the Great to John Buridan reconstructed Aristotle's missing answer to a question he raises in *De somno et vigilia*: Why do we remember our dreams, but not the various actions similar to waking ones that we sometimes perform in sleep?

The volume closes with the first systematic account of the Byzantine reception of Aristotle's theories on memory and recollection: Argyri's overview of the Byzantine tradition offers a comprehensive survey of the development of the tradition from Michael of Ephesus via Sophonias, Metochites and Scholarios to Pachymeres.

The editors of the present volume are grateful to the Riksbankens jubileumsfond, the University of Gothenburg and the Université Paris 1 Panthéon-Sorbonne for their generous funding that has made presentations and discussions of the chapters, as

well as the authoring itself of some of them, possible. Our thanks are due also to the following people: Sten Ebbesen (University of Copenhagen), David Bennett (Institute of Ismaili Studies), Börje Bydén (University of Gothenburg), Pavel Gregoric (Institute of Philosophy, Zagreb), Juhana Toivanen (University of Jyväskylä), Pierre-Marie Morel, Laurent Lavaud and Jean-Baptiste Brenet (Université Paris 1 Panthéon-Sorbonne) from whose help this volume has greatly benefitted in various ways, to Ylwa Sjölin Wirling (University of Gothenburg) for her diligent assistance with formatting and to Jordan Lavender (University of Notre Dame) for his meticulous copyediting, much enriched by his expertise in the history of philosophy.

Christina Thomsen Thörnqvist

VÉRONIQUE DECAIX

Introduction

Aim of the Volume

The common theme of this volume is the reception of Aristotle's *On Memory and Recollection* (from now on, *De memoria et reminiscentia* or just *De memoria*) in several cultural and linguistic settings from Late Antiquity through the end of the fourteenth century. Aristotle's *De memoria et reminiscentia* is the oldest surviving study focused on the explanation of memory and recollection. It is part of Aristotle's minor works on natural philosophy, the *Parva naturalia*, which constitutes a group of short treatises on various themes such as sensation, memory, dreams, breath, youth and old age, etc. This collection belongs primarily to the science of nature, that is, to Aristotle's works on natural philosophy. The study of commentaries on *Parva naturalia* in ancient and medieval philosophy forms a very new branch in the history of philosophy.[1] In this context, the aim of this volume is to shed some light more specifically on the reception of the *De memoria and reminiscentia*. The ten essays, each written by recognised experts in their research fields, are organised in chronological order, allowing us to underline the appropriations and enrichments of, as well as the critical discussions driven by, the Aristotelian conception of memory in Greek, Arabic and Latin traditions.

1 For general overviews on the *Parva naturalia*, see: Pierre-Marie Morel, *Aristote, Petits traités d'histoire naturelle* (Paris: GF Flammarion, 2000); Pierre-Marie Morel, "*Parva naturalia*: tradition grecque," in *Dictionnaire des philosophes antiques*, ed. by Richard Goulet, Supplément (Paris: CNRS Éditions, 2003), pp. 366–74; Pierre-Marie Morel, "Common to Soul and Body in the *Parva Naturalia* (Aristotle, *Sens.* 1, 436b1–12)," in *Common to Body and Soul: Philosophical Approaches to Explaining Living Behaviour in Greco-Roman Antiquity*, ed. by Richard A. H. King (Berlin: De Gruyter, 2006), pp. 121–39; Maria Michaela Sassi, "Percezione e conoscenza nei *Parva Naturalia*," *Studia graeco-arabica*, 4 (2014), 265–74; Börje Bydén (2018), "Introduction: The Study and Reception of Aristotle's *Parva Naturalia*," in *The 'Parva Naturalia' in Greek, Arabic and Latin Aristotelianism. Supplementing the Science of the Soul*, ed. by Börje Bydén and Filip Radovic, Studies in the History of Philosophy of Mind (Dordrecht: Springer, 2018), pp. 1–50. Pieter De Leemans, "*Parva naturalia*, Commentaries on Aristotle's", in H. Lagerlund (ed.) *Encyclopaedia of Medieval Philosophy, Philosophy between 500 and 1500* (Dordrecht, Heildelberg, London, New York: Springer, 2011), 917–23

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Aristotelian Memory in Contemporary Scholarship

This collection of essays is devoted to the reception of the Aristotelian conception of memory and recollection from Antiquity to the end of the Middle Ages. Each essay presents original research on the reception of Aristotle's theory of memory. In the last decades, studies on this topic have focussed on the art of memory and memory techniques in ancient and medieval philosophy.[2] The pioneering work of Mary Carruthers provided a comprehensive analysis of the medieval conception of memory, but it differs from the present volume by virtue of its historical methods and with respect to the theological sources investigated, mainly influenced by Augustine (Hugh of Saint Victor and the Victorine school).[3] Janet Coleman's *Ancient and Medieval Memories* gives a very large overlook of theories of memory from Antiquity to the Renaissance, encompassing all types of memory (Augustinian, theological, etc.). Therefore, its focus is broader than the reception of Aristotle's treatise, which may nevertheless find an analysis in the chapters devoted to Averroes, Albert the Great, and Thomas Aquinas.[4] In *Aristotle on Memory and Recollection*, David Bloch made the first extensive study of Aristotle's *De memoria et reminiscentia* and provided an overview of its reception in the Arabic and Latin medieval traditions (including Albert the Great, Thomas Aquinas, and Peter of Auvergne).[5] The present volume takes advantage of new editions and work by lesser-known authors (Adam of Bockenfield, John Buridan, etc.). Two other collections have been published in recent years: the first[6] exceeds our scope, extending into modern and contemporary philosophy; the second[7] is restricted to the history of Ancient Greek thought.

The purpose of the present volume is to fill the gap by considering philosophical approaches to Aristotle's theory of memory and recollection, investigating late ancient and medieval commentaries devoted to this treatise[8]. Previous research has been dominated by the Neoplatonist theory of memory, especially the conception of Augustine of Hippo, based on its theological importance as *memoria dei* in the Trinitarian context, leaving the Aristotelian approach often overlooked. The contributors to this volume were not assigned specific topics: their only guideline was to focus

2 Paolo Rossi, *Clavis Universalis. Arti mnemoniche e logica combinatoria da Lullo a Leibniz* (Milano-Napoli: Ricciardi, 1960); Frances Yates, *The Art of Memory* (London: University of Chicago Press, 1966).

3 Mary J. Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture* (New York: Cambridge University Press, 1990).

4 Janet Coleman, *Ancient and Medieval Memories. Studies in the Reconstruction of the Past* (Cambridge: Cambridge University Press, 1992).

5 David Bloch, *Aristotle on Memory and Recollection: Text, Translation, Interpretation and Reception in Western Scholasticism*, Philosophia Antica, 110 (Leiden – Boston: Brill, 2007).

6 *Tracce nella mente. Teorie della memoria da Platone ai moderni*, ed. by Maria Michela Sassi (Pisa: Scuola normale di Pisa, 2007).

7 *Greek Memories: Theories and Practices*, ed. by Luca Castagnoli and Paola Ceccarelli (Cambridge: Cambridge University Press, 2019).

8 The classical study on the text is: *Richard Sorabji, Aristotle on Memory*, 2nd ed. (London, Duckworth, 2004).

on the commentaries on *De memoria et reminiscentia* that have appeared in their respective fields of expertise, namely Ancient Philosophy (Perälä; Michalewski), the Arabic tradition (Alpina; Di Martino), Medieval Latin (Chandelier; Brumberg-Chaumont; Ebbesen; Decaix; Thomsen Thörnqvist), and the Byzantine tradition (Argyri). Many of the contributors have made use of materials and sources which are unedited, or only very recently available, putting their work at the cutting edge of research in history of philosophy.

The *De memoria* and Its Context

The *De memoria* belongs to a collection of short treatises gathered under the title *Parva naturalia*, a title which may have been introduced during the Middle Ages by Geoffrey of Aspall († 1287) or Giles of Rome (1245–1316), although the texts were already known beforehand as '*parvi libri*'.[9] Even though the order and number of the treatises varied (see below), a fixed corpus of nine works has been established by standard editions of the *corpus aristotelicum*[10] which we will quote here using their Latin titles: *De sensu et sensato* (436a1–449b3), *De memoria et reminiscentia* (449b3–453b11), *De somno et vigilia* (453b11–458a32), *De insomniis* (458a33–462b11), *De divinatione per somnum* (462b12–464b18), *De longitudine and brevitate vitae* (464b19–467b9), *De iuventute et senectute* (467b10–470b5), *De respiratione* (470b6–478b21), *De vita et morte* (478b22–480b30).

Traditionally, the *De memoria et reminiscentia* is placed in the second position, after the treatise devoted to sensation (*De sensu*) and just before the group of three works dedicated to sleep and dreams (*De somno et vigilia*, *De insomniis*, *De divinatione per somnum*) often read as a single piece in the Latin tradition under the common title *De somno* (see Thomsen Thörnqvist's contribution).

The question of the unity of the *Parva naturalia* as a whole is the subject of debates among scholars,[11] as is the order of the texts in the collection, and their

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9 For a discussion on the general title, see Silvia Donati, "Einleitung" to *De nutrimento et nutrito, De sensu et sensato, cuius secundus liber est De memoria et reminiscentia, in Alberti Magni Opera omnia*, vol. VII, II A (Münster: Aschendorff, 2017), p. XII., for instance by Alfred of Shareshel, Adam of Bockenfield or Geoffrey of Aspall, see Daniel Callus "Introduction of Aristotelian Learning to Oxford," *Proceedings of the British Academy*, 29 (1943), 229–81; Griet Galle, "Edition and Discussion of the Oxford Gloss on *De sensu* 1," *Archives d'Histoire doctrinale et littéraire du Moyen Âge* 75 (2008), 197–281; Julie Brumberg-Chaumont, "Introduction. English Commentaries.," in *Adam of Bockenfield and his Circle on the De memoria et reminiscentia*, Auctores Britannici Medii Aevi, 37 (Oxford: OUP–British Academy, 2021). The author would like to thank Julie Brumberg-Chaumont for having shared with us her unpublished introduction as we were completing this volume.

10 Aristotle, *Parva Naturalia*, ed. by William David Ross (Oxford: Clarendon Press, 1955).

11 For the discussions on the unity and scope of the *Parva naturalia* see Geoffrey E. R. Lloyd, "Aspects of the Relationship Between Aristotle's Psychology and his Biology," in *Essays on Aristotle's De anima*, ed. by Amélie O. Rorty and Martha C. Nussbaum (Oxford: Oxford University Press, 1992), pp. 147–67; Aristoteles, *Werke in deutscher Übersetzung* 14. *Parva naturalia*. 3. *De insomniis, De divinatione per somnum*, transl. and ed. by Philip. J. van der Eijk. (Berlin: Akademie Verlag, 1994), pp. 68–87; Morel, *Aristote*, pp. 9–60; Morel, "*Parva Naturalia,*" pp. 366–74; Morel, "Common to the Body and

link to the Aristotelian corpus.[12] In the opening of the *De sensu*, Aristotle explains that after the study of "the soul as such and each of its faculties," referring to his *De anima*, the aim of the following treatise is to inquire into the properties "common to body and soul" and the "functions common" to all animals as animated living bodies. If the prologue of the *De sensu*[13] is taken as a general statement applying to the whole *Parva naturalia*, the *De memoria* should be understood as pertaining to the science of life, or psycho-physiology, focussing on the definition of memory and recollection and on the causal explanations underlying these psychological activities. Thus, the *De memoria* is mostly a psychological work insofar as it is concerned with the cognitive activities of the soul, as the principle of life — but it is an embodied soul, since memory and recollection both require a physical dimension.

The issue of the treatise's position within the Aristotelian corpus is also a difficult question. Indeed, its place within the *Parva naturalia* was not firmly established during the Middle Ages. The text was circulated in different configurations, each with implications for its interpretation. The *De memoria* was transmitted either as part of Aristotle's natural philosophy, or as an independent treatise that circulated separately. An argument for the independent reading is that, in opposition to the general program of the *Parva naturalia*, *De memoria* deals with an activity proper to humans only — namely, recollection. On the other hand, in the early Latin reception, it was treated as the final section of the *De anima*.[14] In this perspective, the treatise has been interpreted as a work belonging to the science of the soul, psychology, rather than physics. Even though the expression "philosophy of mind" is surely anachronistic with respect to Aristotle's work, the *De memoria* tackles mental processes such as memorising, remembering and recollecting. In this regard, the *De memoria* has been considered as a supplement to the theory of the soul developed in the *De anima*.

Soul," pp. 121–39; Thomas K. Johansen, "What's New in the *De sensu*? The Place of the *De sensu* in Aristotle's Psychology," in *Common to Body and Soul: Philosophical Approaches to Explaining Living Behaviour in Greco-Roman Antiquity*, ed. by Richard A. H. King (Berlin: De Gruyter, 2006), pp. 140–64; Sassi, "Percezione", pp. 265–74. See also Richard A. H. King, *Aristotle on Life and Death* (London: Duckworth, 2001), pp. 34–73, and Bydén, "Introduction," pp. 2–11. However, this general discussion exceeds the aim of the present introduction.

12 François Nuyens, *L'Évolution de la Psychologie d'Aristote* (Louvain: Éditions de l'Institut supérieur de philosophie, 1984); Marwan Rashed, "Agrégat de parties ou *vinculum substantiale*? Sur une hésitation conceptuelle et textuelle du *corpus* aristotélicien," in *Aristote et le mouvement des animaux: Dix études sur le* De motu animalium, ed. by André Laks and Marwan Rashed (Villeneuve d'Ascq: Presses Universitaires du Septentrion, 2004), pp. 185–202.

13 Aristotle, *De sensu*, 1, 436a2-4, transl. by John I. Beare in *The Complete Works of Aristotle. The Revised Oxford Translation*, ed. by Jonathan Barnes (Princeton: Princeton University Press, 1984, Second Printing, 1985), p. 693: "Having now considered the soul, by itself, and its several faculties, we must next make a survey of animals and all living things, in order to ascertain what functions are peculiar, and what functions are common, to them."

14 For a more detailed analysis of the reception of the De memoria, see: Julie Brumberg-Chaumont, "Introduction. English Commentaries" (2021).

General Overview of the Aristotelian *De memoria* and *reminiscentia*

Memory

The *De memoria* is a text of special importance, since it deals with a topic of interest for Aristotle's theory of the soul in general and also provides a methodological key for understanding his philosophical approach.[15] The treatise is divided into two chapters — the first on memory, the second on recollection — but the method of analysis remains the same in both, as we can see in the parallel formulations of the opening and closing lines of the treatise:

> In discussing memory and remembering, it is necessary to say what they are, and how their occurrence is to be explained, and to which part of the soul this affection, and recollecting, belong (*De mem.*, 449a4–5, transl. Richard Sorabji, p. 47.).

> Now, it has been stated what is the nature of memory and remembering, and what is in the soul that animals remember with, and what recollecting is, and in what manner it occurs, and through what causes (*De mem.*, 453b7–8, transl. Richard Sorabji, p. 60.).

Three main concerns animate the treatise: a) the definition of memory and recollection; b) the causal explanation of these processes; and c) the part of the soul to which they belong (cf. Perälä's contribution in this volume). The *De memoria* follows the *De anima* (in particular, books 2–3 on common sense and imagination) and the *De sensu*, which deals primarily with sensation. When defining memory, Aristotle states that the object of memory is something that has been perceived in the past. A memory is stable disposition (*hexis*) left in the soul after some time has elapsed, such that it is differentiated from sensation (*aisthesis*) and opinion or hope (*doxa*), which deal with present and future objects, respectively. Memory is caused by a past sensation and pertains to the sensing part of the soul, fulfilling the scope of investigation of the *Parva naturalia*, which is devoted to psycho-physical activities that occur "either together, or through sensation" (436b3–4). The difference between sensation and memory is a temporal one: whereas sensation is actual and the sensed object is present, memory has to do with past things. Thus memory presupposes the perception of time and should belong to the part of the soul capable of apprehending time. This is why only superior animals, aware of time, can remember.

These former perceptions have left marks or imprints that Aristotle describes as images, showing the close connection between memory and imagination (*phantasia*), the faculty of retaining images of things in their absence. This new qualification gives rise to a first aporia (450a25): if, when one remembers, the affection is present, then memory cannot be said to be of the past, as previously stated. His solution to this

15 See Richard Sorabji, *Aristotle on Memory* (1st edition 1972, 2nd edition 2004, translation of the text quoted in Bristol: Bristol Classical Press, 2012).

relies on a causal explanation of these memory traces by analogy to a signet-ring and a wax tablet. The second aporia (450b11) seems even more insoluble: do we remember the past thing or the image in the soul? If we remember the image, then it is present, and memory is not of the past; yet if we remember the past thing, how can a no-longer-existing thing ever trigger an actual perception?

The solution (450b20) consists in distinguishing two ways in which the same image may be considered: in itself, as when one contemplates something in its own right, in which case it is considered as a figure or a picture, or in reference to something else, in which case it is considered as a likeness and a copy. Taken relatively to the past thing it is supposed to represent, the image is a likeness (*eikon*), and therefore properly called a memory.

This twofold viewing of internal images explains the fact that when a past disposition is reactivated by an inner movement one has to decipher whether it is a memory or a mere image by reference to the past thing. People who are speculating on images as memories of past experience suffer from delusion, as in the case exemplified by Antipheron of Oreos.

Recollection

In the second chapter, Aristotle enquires into the definition, causal explanation and location of recollection. The distinction between memory and recollection is also subject to controversies: some scholars[16] have argued that the same faculty — namely, memory — is able to perform these two activities (remembering and recollecting). However, Aristotle is very thorough in differentiating these two processes in the opening of the second chapter, where he states that recollection is not a recovery of a memory nor does it require a previous memory. Recollection is defined as the recovery of scientific knowledge or perception, different from acquiring knowledge, and both from remembering and from re-learning. Recollection is not a recovery of something that has been already sensed or learned (which would constitute a memory), nor something taught by someone else.

Recollection is to be distinguished from "the recovery" of something forgotten (remembering) or "the acquisition of memory" (memorising). This distinction between recollection and re-acquiring knowledge is a critique directed at Plato's theory of knowledge by recollection in *Meno* (81D, 81E) and *Phaedo* (73B, 75E, 76A). To avoid any confusion with the Platonist dialectic, Aristotle states that recollection should proceed from an intrinsic principle. Recollection consists of bringing forth something that has been experienced or learned before. This reference to a past dimension (the interval between the time of learning and recollection) signals the difference between the Platonic and Aristotelian theories.

Another touchstone for differentiating these activities of remembering, re-learning and recollecting is the process by which they occur. For Aristotle, recollection is a kind of change (*kinêsis* 451b11) in which the subject moves itself from the starting-point to

16 For instance: Julia Annas, "Aristotle on Memory and the Self," in *Essays on Aristotle's De anima*, ed. by Martha C. Nussbaum and Amélie O. Rorty (Oxford: Oxford University Press, 1992/1995), pp. 297–311.

what follows (452a4–12). This means that one may initiate recollection as a voluntary movement in an internal search (*zêtesis* 453a12, a15, a25) that takes the form of a reasoning process (*syllogismos* 453a9–14). The object of recollection is the recovery of existing knowledge or perception (451b2–5) sought from a particular starting-point. Recollection involves a chain of ideas, and their succession may be facilitated by laws of association — principles that Aristotle inherits from mnemonic techniques used in ancient rhetoric (e.g. similarity, opposition, contiguity). Aristotle insists on the importance of a starting-point in "the search for the successor," and states, by analogy with syllogism, that it has to begin with the middle-term. Consequently, only animals capable of deliberation are capable of recollecting, so recollection pertains solely to humans (453a6–14). Despite this proximity with thought, Aristotle claims that recollection remains a bodily affection, as is the case for memory, i.e., recollection is an activity of the soul that requires a physical substrate. To this extent, memory and recollection are both cognitive activities revealing the functional continuity between soul and body and could never occur without a physical substratum. Once again, because Aristotle is considering the corporeal conditions for the phenomena under investigation, this treatise demonstrably belongs to the framework of the *Parva naturalia*.

The Arabic Tradition of *De memoria*

The Arabic version of the *De memoria* was part of the *Kitāb al-Ḥiss wa-l-maḥsūs* ("Book on sense perception and the perceived"), the Arabic translation of the *Parva naturalia*, so-named after the topic of the first of those treatises. This "translation" is not a faithful rendering of the Greek original, but rather an adaptation dating from the mid-ninth century.[17] Indeed, this version is augmented by Neoplatonic and Galenic elements of later provenance. Its origins in the circle around Al-Kindī (800–70) is now a subject of consensus among scholars.[18] On the basis of this Arabic adaptation,[19] Averroes completed a short commentary (*Epitome*) in 1170, including the *De memoria* (see Di Martino's contribution in this volume).[20] In the incipit, Averroes states that he will solely comment on the first treatises of the *Parva naturalia* "since the other three

17 Rotraud E. Hansberger, "*Kitāb al-Ḥiss wa-l-maḥsūs*: Aristotle's *Parva Naturalia* in Arabic Guise," in *Les 'Parva naturalia' d'Aristote: Fortune antique et médiévale*, ed. by Christophe Grellard and Pierre-Marie Morel (Paris: Publications de la Sorbonne, 2010), pp. 143–62; Rotraud E. Hansberger, "The Arabic Adaptation of the *Parva naturalia* (*Kitāb al-Ḥiss wa-l-maḥsūs*)," *Studia graeco-arabica*, 4 (2014), pp. 301–14.

18 A copy of the text was discovered by Hans Daiber in 1985 in a manuscript held in the Raza Library (Rampur, India), and an edition is under preparation by Rotraud E. Hansberger.

19 There had been some uncertainty about whether the text upon which Averroes based his commentary is the adaptation or another (lost) recension of an Arabic translation (Shlomo Pines, "The Arabic Recension of the *Parva Naturalia* and the Philosophical Doctrine Concerning Veridical Dreams According to al-Risāla Al-Manāmiyya and Other Sources," *Israel Oriental Studies*, 4 (1974), pp. 104–53), but the discovery of the adaptation in Rampur allows us to establish that it was based upon the adaptation.

20 *Averrois Cordubensis compendia librorum Aristotelis qui Parva naturalia vocantur. Textum arabicum recensuit et adnotationibus illustravit Henricus Blumberg*, ed. by Harry Blumberg, (Cambridge, MA: The Mediaeval Academy of America, 1972).

were not available at his time."[21] Averroes' epitome was read as a source of knowledge of the Aristotelian text and was therefore a major influence on other traditions, for instance on the Hebrew and Latin commentaries.[22]

Although he did not write any dedicated commentaries on Aristotle, Avicenna developed his thought in a Peripatetic framework. His theory of the soul, as it is found in his monumental *Kitāb al-Šifāʾ* (on memory, see especially books I, IV and V), exerted an important influence on Arabic philosophy and on the later tradition. Memory is defined in the framework of the internal senses[23] (see Alpina's contribution in this volume). The basis of Avicenna's psychology relies on Aristotelian foundations: the five external senses receive sensible forms of their proper objects (i.e., colour for sight, sound for hearing, odour for smelling, etc.). Beside these sensations, Avicenna develops a whole range of perceptive activities that are not explained by actual sensation, such as internal imagination, estimation, and memory. Those perceptual activities exceed the scope of external sensation, but are derived from it. Sensible forms are transmitted through the first internal sense, the common sense, to *retentive imagination*, which is able to retain an image in the absence of the external object. Thereupon the third internal sense, compositive imagination, may compose and divide images. The fourth internal sense, called estimation, has the power to perceive its proper object, the "intentions,"[24] or "un-sensed forms;" the fifth and last, memory, is defined as the power to preserve those intentions. Avicenna explains further that the relationship between common sense and imagination is the same as the one between estimation and memory. The Avicennian systematisation of the internal senses is based on two perceptive faculties (common sense and estimation) and two conservative powers (imagination and memory), with the former member of each pair retaining sensible forms and the latter retaining intentions.

Several innovations in the Arabic tradition should be emphasised for their importance in the Latin speaking-world. First, in the framework of the internal senses, memory is defined as the "storehouse of intentions." This new definition has three important features: first, memory is a (passive) power of conservation; second,

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21 Blumberg (ed.), *Averrois Cordubensis*, p. 3; Carla Di Martino, "Les *Parva Naturalia* dans la tradition arabe," in *Dictionnaire de Philosophes Antiques*, ed. by Richard Goulet, Supplement (Paris: CNRS Edition, 2003), pp. 260–63.

22 Bydén, "Introduction".

23 Harry A. Wolfson, "The Internal Senses in Latin, Arabic, and Hebrew Philosophic Texts," *Harvard Theological Review*, 28 (1935), pp. 69–133; *Avicenna's Psychology (English translation of Book 2, Chapter 6)*, ed. by Fazlur Rahman (London: Oxford University Press, 1952).

24 On the various translations and meanings on the Arabic term *maʿnân*: cf. Kwame Gyekye, "The Terms 'Prima Intentio' and 'Secunda Intentio' in Arabic Logic," *Speculum*, 46 (1971), pp. 32–38; Christian Knudsen, "Intentions and Impositions", in *The Cambridge History of Later Medieval Philosophy*, ed. by Norman Kretzmann et al. (Cambridge: Cambridge University Press, 1982), pp. 479–95; Deborah L. Black, "Intentionality in Medieval Arabic Philosophy," *Quaestio*, 10 (2010), pp. 65–81; and Rotraud E. Hansberger, "Representation of Which Reality? 'Spiritual Forms' and '*maʿānī*' in the Arabic Adaptation of Aristotle's *Parva naturalia*," in *The 'Parva naturalia' in Greek, Arabic and Latin Aristotelianism. Supplementing the Science of the Soul*, ed. by Börje Bydén and Filip Radovic (Dordrecht: Springer, 2018), pp. 99–121.

its proper object is an intention, an un-sensed form; and third, any mention of the 'past', crucial in Aristotle's definition, disappears.[25] Second, the Arabic tradition tended to accentuate the link between recollection and thought. One of the reasons may be imputed to the version upon which Arabic philosophers were commenting, the so-called 'adaptation' (see above), augmented by Neoplatonic materials. The subsequent tendency is either to separate memory from recollection, or even from sense perception, or to understand the latter (recollection) as an intellectual operation performed by reminiscence, which contributes to the conflation of the functions of memory and recollection (e.g. in Averroes' definition of recollection as *investigatio per rememorationem*). Last, because of the close relationship between philosophy and medicine in Arabic works, Avicenna and Averroes, who were also physicians known for their medical masterworks, the *Canon of Medicine* and the *Colliget*, paid great attention in the localisation of memory. According to Galen, the internal senses should be situated within the brain, which comes into conflict with the Aristotelian theory according to which the unifying centre of sensation should be located in the area surrounding the heart. Therefore, they inquired into the diseases and dysfunctions of memory from a medical point of view that could contradict their philosophical doctrine (see Chandelier's contribution in this volume). The Arabic reception of *De memoria*, placed at the junction of several traditions (philosophical, theological, medical), put the question of whether the *Parva naturalia* should be studied by the physician or the philosopher at the core of their discussion.[26]

The Latin Tradition on *De memoria*

As we saw above, the Latin transmission of *De memoria* is a rather complicated issue.[27] The text circulated either as an independent treatise, or as the last chapter of *De anima*, or in the context of the *Parva naturalia* (in the bloc formed by *De sensu*, *De memoria*, and *De somno*), where its location was not firmly established: the treatise is often inserted before the *De sensu* in the *corpus vestutius* (see Brumberg-Chaumont). This circulation is due to the *Translatio vetus* in which the last sentence of *De sensu*,

25 Deborah L. Black, "Memory, Individuals, and the Past in Averroes' Psychology," *Medieval Philosophy and Theology*, 5 (1996), pp. 161–87.

26 On the posterity of Aristotle's dictum: "Where the philosopher finishes, there begins the physician", see Luca Bianchi, "Ubi desinit physicus, ibi medicus incipit," in *Summa doctrina et certa experientia. Studi su medicina e filosofia per Chiara Crisciani*, ed. by Gabriella Zuccolin (Firenze: SISMEL, Edizioni del Galluzzo, 2017), pp. 5–28.

27 David Bloch, "The Manuscripts of the *De sensu* and *De memoria*: Preliminary texts and full collations," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 75 (2004), pp. 7–119; Julie Brumberg-Chaumont, "La première réception du *De memoria et reminiscentia* au Moyen Âge Latin: le commentaire d'Adam de Buckfield," in *Les 'Parva Naturalia' d'Aristote: Fortune antique et médiévale*, ed. by Christophe Grellard and Pierre-Marie Morel (Paris: Publications de la Sorbonne 2010), pp. 121–41; Donati, "Introduction" (2017); Brumberg-Chaumont, "Introduction. English English Commentaries" (2021).

the explicit announcing *De memoria* ("*relinquorum autem primo considerandum de memoria et memorari*"), was placed in the *incipit* of the *De memoria*.[28]

There are two extant Latin translations of *De memoria*. First, the 'old translation' (*Translatio vetus*) was made by James of Venice in the mid-twelfth Century. Based on textual evidence, it has been assumed that the version that was circulated during the first half of the thirteen century was a variably corrupted version of the *Translatio Jacobi*.[29] The second extant translation, the new translation (*Translatio nova*), by William of Moerbeke (1266, ed. Gauthier 1985), was mainly a correction of the *Translatio Jacobi* with the help of a more reliable Greek original.

Also crucial in the history of the medieval interpretations of Aristotle *De memoria* were the translations of Avicenna into Latin (in Toledo by Avendauth Israelita in collaboration with Domenicus Gundissalinus *c.* 1152–66) and later of Averroes (by Michael Scot 1230),[30] who both had a great impact on Latin medieval thought. Before the arrival of this corpus, Latin authors were mainly influenced by the common usage of the term *memoria* and by the authority of Augustine on the subject (especially in the *Confessiones*, X and *De trinitate*, XIV). Because of the decisive influence of Augustine, the Neoplatonic theory of recollection remains vivid in the Latin theological tradition, leaving the philosophical and Aristotelian approach and the commentaries produced by masters of arts often overlooked.[31]

The reception of Aristotle's *De memoria* follows the same path as that of his natural philosophy in the Latin-speaking areas, which was banned from the teaching curriculum in Paris in 1210, 1215, and 1231.[32] At the turn of the thirteenth century, schoolmen had at their disposal a corpus constituted from the *Avicenna Latinus* and *Averroes Latinus* and other important treatises such as the *De differentia spiritus et animae* of Costa ben

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28 See Bloch, "The Manuscripts;" David Bloch, *Aristotle on Memory and Recollection*, pp. 166–79; Brumberg-Chaumont, "La première réception"; Brumberg-Chaumont, "Introduction. English Commentaries."

29 Bloch, "The Manuscripts;" Brumberg-Chaumont, "La première réception;" Silvia Donati "The Critical Edition of Albert the Great's Commentaries on *De sensu et sensato* and *De memoria et reminiscentia*: Its Significance for the Study of the Thirteenth-century Reception of Aristotle's *Parva Naturalia* and its Problems," in *The Letter before the Spirit: The Importance of Text Edition for the Study of the Reception of Aristotle*, ed. by Aafke M. I. van Oppenraay with the collaboration of Resianne Fontaine, Aristoteles Semitico-Latinus, 22 (Leiden – Boston: Brill, 2012), pp. 345–99.

30 There are two versions of the Averroist Epitome edited by Emily L. Shields (Averrois Cordubensis *Compendium Libri Aristotelis De sensu et sensato*, in Averrois Cordubensis *Compendia Librorum Aristotelis qui Parva naturalia vocantur*, recensuit Aemilia Ledyard Shields, adiuvante Henrico Blumberg, Corpus Commentariorum Averrois in Aristotelem, (Versionum Latinarum) vol. 7 (Cambridge, MA: Medieval Academy of America, 1949).

31 For a list of questions-commentaries on *De memoria*, see Sten Ebbesen, Christina Thomsen Thörnqvist and Véronique Decaix, "Questions on *De sensu et sensato*, *De memoria* and *De somno et vigilia*: A Catalogue," *Bulletin de philosophie médiévale*, 57 (2015), pp. 61–115.

32 Henri Denifle and Émile Châtelain (ed.), *Chartularium Universitatis Parisiensis*, t. 1 (Paris: 1889); Gabriel Théry, *Autour du décret de 1210*, I–II (Kain: Le Saulchoir 1925–1926); Fernand van Steenberghen, *La philosophie au XIII^e siècle. Deuxième mise à jour*, Philosophes médiévaux, 28 (Louvain-la-Neuve: Éditions de l'Institut supérieur de philosophie, 1991); Johannes M. M. H. Thijssen, *Censure and Heresy at the University of Paris, 1200–1400* (Philadelphie: University of Pennsylvania Press, 1998); Luca Bianchi, *Censure et liberté intellectuelle à l'Université de Paris (XIII^e-XIV^e siècle)* (Paris, Les Belles Lettres, 1999).

Luca and the *De anima et potentiis eius* (*c.* 1225)[33] and *De potentiis animae and objectis* (*c.* 1230),[34] all of which interacted with the reception of the *De memoria*. From the Arabic tradition, Latin thinkers appropriated the object of memory (the so-called intentions) and the system of the internal senses. By contrast with the Parisian situation, Aristotelian natural philosophy remained significant in England for masters of arts in Oxford in the middle of the thirteenth century. The so-called 'Oxford-Gloss,' a set of interlinear and marginal glosses accompagnying natural works of Aristotle compiled in England from the 1230's onwards shows an early interest for *De memoria* in the context of the *corpus vestutius*.[35] The earliest commentaries devoted to *De memoria* were written around 1240 (these include the commentary of Adam of Bockenfield (1220–85), master of arts in Oxford, probably between 1240 and 1243 as stated by J. Brumberg-Chaumont (2021) and the *Sententia de memoria* analysed by Brumberg-Chaumon in this volume.. Albert the Great's commentary on the *Parva naturalia* had several consequences for the reception of the *De memoria*: the *translatio vetus* remained authoritative, and his important recourse to Averroes' epitome made the latter's influence quite decisive for the later tradition (see Decaix in this volume).

Due to the registration of Aristotle's natural philosophy in the teaching program of the arts faculty in Paris in 1255 and the new translation by William of Moerbeke, both literal and questions commentaries proliferated in the following period.[36] Although several commentaries have recently been made available thanks to Sten Ebbesen,

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33 Anonymus, *De anima et de potentiis eius*, ed. by René Antoine Gauthier, in "Le traité *De anima et de potenciis eius* d'un maître ès arts (vers 1225)," *Revue des sciences philosophiques et théologiques*, 66 (1982), pp. 3–55.

34 Anonymus (1952) *De potentiis animae et obiectis*, ed. by Daniel A. Callus, in 'The Powers of the Soul. An Early Unpublished Text', *Recherches de théologie ancienne et médiévale*, 19 (1952), pp. 131–70.

35 Charles Burnett, "The Introduction of Aristotle's Natural Philosophy into Great Britain: A Preliminary Survey of the Manuscript evidence," in *Aristotle in Britain during the Middle Ages*, ed. by John Marenbon (Turnhout: Brepols, 1996), pp. 21–50; Charles Burnett, "The Introduction of Scientific Texts into Britain, c. 1100–1250," in *The Book in Britain*, II, eds Nigel Morgan and Rodney M. Thomson (Cambridge: 2008), pp. 446–53. On several commentaries on *De memoria* written in England between the 1250s and 1260s, see René Antoine Gauthier, "Introduction" to Thomas Aquinas *Sentencia libri De sensu et sensato cuius secundus tractatus est De memoria et reminiscentia*, ed. by René Antoine Gauthier in *Sancti Thomae de Aquini Opera omnia*, vol. 45/2 (Roma-Paris: Commissio Leonina-Vrin, 1985). pp. 116–25. Galle, Griet. "The Dating and the Earliest Reception of the Translatio vetus of Aristotle's De *sensu*," *Medioevo*, 33 (2008): 1–90 ; ead. "Edition and Discussion of the Oxford Gloss on *De sensu*," Archives d'Histoire Doctrinale et Littéraire du Moyen Âge, 75 (2008): 197–281 ; Emmanuelle Kuhry, "Vers une édition électronique de la glose d'Oxford", *Humanités numériques*, 2 (2020), https://doi.org/10.4000/revuehn.450; ead., "The Compilatio de libris naturalibus Aristotelis (Compendium philosophie): Evidence for the Early Reception of the Glossa anglicana and of Adam of Buckfield's Commentaries;" *Recherches de Théologie et de Philosophie Médiévales*, 86(2) (2019): 283–313.

36 Jozef de Raedemaker, "Une ébauche de catalogue des commentaires sur les *Parva naturalia*, parus aux XIII^e^, XIV^e^ et XV^e^ siècles," *Bulletin de philosophie médiévale*, 7 (1965), pp. 95–108; Silvia Donati, "Albert der Große als Kommentator of the Translatio Vetus der Schrift *De memoria et reminiscentia des Aristoteles*," in: *Via Alberti. Texte-Quellen-Interpretationen*, hrsg. L. Honnefelder et al.,. Münster 2009, pp. 509-559; Ebbesen, Thomsen Thörnqvist, and Decaix.

most of them still remain unedited.[37] While the *corpus recentius* superseded the older translations in the 1260s, the schoolmen continued to use the two translations of *De memoria* at their disposal, as is the case presumably for John of Jandun and John Buridan. A notable exception to this tendency is Aquinas' literal commentary (1269, edited by Gauthier, 1985) which, with help of the *translatio nova*, tries to return to the original Aristotelian conception of memory, rid of any Neoplatonic or Arabic interpretations. Following Averroes, Aquinas puts the *De memoria* after the *De sensu* but includes the former in the later, interpreting *De memoria* as the second book of the *De sensu*.

Two later commentaries on *De memoria* are of special importance: those of John of Jandun (1285–1328) and John Buridan (1295/1300–1358/61) (See Ebbesen's contribution in this volume). The first was widely read during the Late Middle Ages and the Renaissance, especially in northern Italy.[38] John of Jandun's commentary, written in 1309, shows an extensive knowledge of Aristotle's and Averroes's doctrines[39] and an interest in natural philosophy. It circulated in the universities of northern Italy (e.g. in Padua and Bologna), where philosophy was studied in close connection with medicine during the late Middle Ages and the Renaissance (see Chandelier's contribution in this volume). John Buridan wrote both literal and question-commentaries on *De memoria*,[40] but only the latter was printed in a Renaissance edition (Lokert 1516). His influence was decisive for Nicole Oresme (1320–82) and in Eastern Europe (Erfurt, Prague) for Marsilius of Inghen (1340–96) and Albert of Saxony (1320–90).[41]

Greek and Byzantine Tradition

A curious fact is that the *Parva naturalia* seems to have no reception during the Hellenistic period. Besides Alexander of Aphrodisias' *De sensu*, and Aspasius' lost commentary on the same text, there seems to be no testimony to commentaries

37 Sten Ebbesen, "Radulphus Brito on Memory and Dreams. An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 85 (2016), pp. 11–86; Sten Ebbesen, "Anonymus Orielensis 33 on *De memoria*. An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 85 (2016), pp. 128–61; Sten Ebbesen, "Anonymus Parisini 16160 on *Memory*. An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 85 (2016), pp. 162–217.

38 Pieter de Leemans, "*Secundum viam naturae et doctrinae*: Lire le *De motu animalium* et les *Parva naturalia* d'Aristote au Moyen Âge," in *Les 'Parva naturalia' d'Aristote: fortune antique et médiévale*, ed. by Christophe Grellard and Pierre-Marie Morel (Paris: Publications de la Sorbonne, 2010) pp. 197–220; Aurélien Robert, "John of Jandun on Minima Sensibilia," *Documenti e studi sulla tradizione filosofica medievale*, 25 (2014), pp. 365–402.

39 On the extent of Jandun's Averroism, cf. Jean-Baptiste Brenet, *Transferts du sujet. La noétique d'Averroès selon Jean de Jandun* (Paris: Vrin 2004).

40 Bernd Michael, "Johannes Buridan: Studien zu seinem Leben, seinen Werken und zur Rezeption seiner Theorien im Europa des späteren Mittelalters" (unpublished doctoral thesis, Freie Universität Berlin, 1985); Véronique Decaix, "La conception buridanienne de la mémoire dans les *Parva naturalia,*" in *Miroirs de l'amitié. Mélanges offerts à Joël Biard*, ed. by. Christophe Grellard (Paris: Vrin, 2017), pp. 309–27.

41 Jole Agrimi, *Le "Quaestiones de sensu" attribute a Oresme e Alberto di Sassonia*, Pubblicazioni della Facolta di lettere e filosofia dell'Universita di Pavia (Firenze: La Nuova Italia, 1983); Jole Agrimi, "Les *Quaestiones de sensu* attribuées à Albert de Saxe: Quelques remarques sur les rapports entre philosophie naturelle et médecine chez Buridan, Oresme et Albert," in *Itinéraires d'Albert de Saxe, Paris- Vienne au XI^e siècle*, ed. by Joël Biard (Paris: J. Vrin, 1991), pp. 191–204.

devoted to the *Parva Naturalia*. Generally, the *Parva naturalia* and the zoological works of Aristotle seem to have been neglected in Late Antiquity. This may be explained by the dominance of the Neoplatonic schools in Rome, Alexandria, and Athens (*c.* 250–600). However, traces of the Aristotelian *De memoria* may be found in the critical discussions of Neoplatonic thinkers such as Plotinus, Porphyry, Proclus (Enn. 4. 3. 25, 4. 6. 3) and Iamblichus (See Michalewski's contribution in this volume).[42]

The reception of the Aristotelian *De memoria* in Greek-speaking areas begins only with Michael of Ephesus in the twelfth century. His commentary was an important witness to the reception of the *Parva naturalia*. It has been considered a reliable authority for establishing the order of the treatises.[43] Following Alexander's *De sensu*, Michael tends to consider the group formed by the *De memoria* and the *De somno* (i.e. the three treatises on sleep and dreams) as a single work, thus initiating its transmission as a block.

Michael's commentary seems to have had no reception in the Arabic and Hebrew tradition. We know very little about its reception in Latin-speaking areas, but it has been hypothesised that it could have reached Albert the Great[44] and even William of Moerbeke when he was translating the *De memoria et reminiscentia*. This could be one of the lines of explanations for the re-organisation of the treatises in such a way that the *De memoria* follows the *De sensu* in the *corpus recentius*. But there is no textual evidence to sustain, so the ordering may also be also attributed to Moerbeke's own initiative, the translation he made of Alexander of Aphrodisias' *De sensu* during the same period (1266, edited by Thurot, 1875).

The influence of Michael's *De memoria* is established in the Byzantine tradition, where the four paraphrases that appeared between the late thirteenth century and the fifteenth century rely heavily on his commentary: Sophonias (1296), Georges Pachymeres (1242–1310), Theodore Metochites (1270–1332), and George Scholarios (1400–73)[45] (cf. Argyri's contribution to this volume). During the Renaissance (mid-sixteenth century), Michael's commentary was translated into Latin by Niccolò

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42 See Richard A. H. King, *Plotinus and Aristotle on Memory*, Quellen Und Studien Zur Philosophie, 94 (Berlin: De Gruyter, 2009); Riccardo Chiaradonna, "Plotinus on Memory, Recollection and Discursive Thought," in *Greek Memories: Theories and Practices*, ed. by Luca Castagnoli and Paola Ceccarelli (Cambridge: Cambridge University Press, 2019), pp. 310–24.

43 See Rashed, "Agrégat de parties."

44 Anthony Preus, *Aristotle and Michael of Ephesus On the Movement and Progression of Animals. Translated, with introduction and notes* (Hildesheim – New York: Georg Olms Verlag, 1981).

45 Sophonias, *In Aristotelis Parva naturalia paraphrasis*, ed. by Paul Wendland, Commentaria in Aristotelem Graeca, 5.6 (Berlin: Reimer, 1903); Theodore Metochites, "Theodore Metochites on Aristotle's *De memoria*. An Edition," ed. by David Bloch, in *Cahiers de l'Institut du Moyen Âge Grec et Latin*, 76 (2005), pp. 3–30; *Aristotelis De somno et vigilia liber adiectis veteribus translationibus et Theodori Metochitae commentario*, ed. by Hendrik Joan Drossaart Lulofs, (Leiden: Burgersdijk & Niermans, 1943), pp. 13–22; Scholarios, *Γενναδίου τοῦ Σχολαρίου ἅπαντα τὰ εὑρισκόμενα: Oeuvres complètes de Gennade Scholarios* (8 vols), vol. 7: *Parva naturalia*, ed. by Martin Jugie, Louis Petit, and Xenophon A. Sideridès (Paris: Maison de la Bonne Presse, 1936), pp. 455–57.

Leonico Tomeo (1456–1531), and several commentaries emerged around 1520 in Northern Italy, but very little is known about their reception.[46]

Some Philosophical Issues of the Reception of *De memoria*

Despite of its brevity, *De memoria* is a very philosophically rich treatise. As a conclusion, we would like to point out some of the philosophical issues sparked by the historical reception of the treatise.

Placed at the crossroads between natural philosophy and psychology, *De memoria* is crucial for understanding the Aristotelian theory of the soul. Memory and recollection belong to the affections and functions "common to body and soul," thus the treatise inquires into mental activities that cannot occur without some bodily disposition. Therefore, the reception of *De memoria*, in questioning the causal interaction between body and soul, put Aristotle's hylomorphism at stake. The treatise has been considered as an appendix to Aristotle's *De anima*, and its study may extend our knowledge of the Aristotelian theory of the soul by deepening the relation between sensation and imagination. Several points of discussion have been emphasised by the tradition. The first is the importance of common sense and perception in the awareness of time, upon which memory depends. The second is the description of the object of memory as an image, or as a bearer of representational content, which led to an explanation of the process of memory in intentional terms. Third, Latin authors, such as Albert the Great and Thomas Aquinas, established a link between natural memory and artificial memory, especially in the case of recollection, assimilating the *artes memoriae* inherited from Roman rhetoric (*Ad Herennium*, Cicero, Quintilian) into their philosophical commentaries on Aristotle's *De memoria*.

The proximity between memory, recollection and thought has been stressed by the later tradition. Indeed, the importance of images for the process of thought, established in *De anima*, is interpreted in coherence with the passage in which memory and thought are correlated, leading to an intellectualist reading of memory. The resulting tendency was to ascribe to memory a more active function than in the Aristotelian treatise. Arabic thinkers, in attributing a new object to memory, i.e., intentions, characterised by cognitive content, opened a new line of interpretation of these processes according to which they were independent from any temporal dimension and closer to thought. Moreover, the Augustinian definition of memory

46 See especially Michele Trizio, "The Byzantine Reception of Aristotle's *Parva Naturalia* (and the Zoological Works) in Eleventh and Twelfth Century Byzantium: An Overview," in *The 'Parva Naturalia' in Greek, Arabic and Latin Aristotelianism. Supplementing the Science of the Soul*, ed. by Börje Bydén and Filip Radovic (Dordrecht: Springer, 2018), pp. 155–68; John Monfasani, "George Gennadius II Scholarios and the West: Comments on Demetracopoulos, "George Scholarios' Abridgement of the *Parva Naturalia*"," in *The 'Parva Naturalia' in Greek, Arabic and Latin Aristotelianism.* pp. 317–23, and Roberto Lo Presti, "Localizing Memory and Recollection: The Sixteenth-Century Italian Commentaries on Aristotle's *De memoria and reminiscentia* and the Question concerning the Degrees of (dis)embodiment of the "Psychic" Processes," in *The 'Parva Naturalia' in Greek, Arabic and Latin Aristotelianism*, pp. 325–42.

as *memoria sui*, inserted the problem of self-consciousness, or reflexivity, into the core of the discussions, importing also Augustine's reflections on oblivion, absent from the original Aristotelian treatise. On the basis of discussions brought about by the Aristotelian text, the question as to whether memory and recollection might be "common to all animals," or solely 'human' faculties, is addressed by medieval thinkers. Indeed, the above-mentioned characterisations of memory and its conflation with recollection, understood as a kind of intellectual memory, show the extent to which later thinkers profoundly diverged from the basic Aristotelian text they were commenting upon, and from one another. Consequently, the present study on the reception of Aristotle *De memoria and reminiscentia* manifests the philosophical inventiveness and cultural wealth of the commentary practice in the history of medieval thought. This hybridisation between sources, and the fruitful cross-linguistic dialogue between Neoplatonic, Arabic, Latin and Byzantine traditions, gave birth to original explanations of the processes of memorising, remembering and recollecting during the Middle Ages.*

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MIKA PERÄLÄ

Aristotle's Three Questions about Memory

1. Introduction

The *De memoria et reminiscentia* (*Mem.*) begins with three questions that define the aims of the entire treatise. Aristotle claims, "We need to discuss memory and remembering: what it is, why it occurs, and to which part of the soul this affection and recollection belong" (*Mem.* 449b4–6).[1] I shall refer to these questions as the 'What?' question, the 'Why?' question, and the 'Which part?' question.

The three questions address the nature of memory (μνήμη) from various perspectives. The 'What?' question applies a formulaic expression 'What it is' (τί ἐστιν), which Aristotle, in *Analytica posteriora* (*APo.*) 2.1, separates from the more basic question of whether that item exists (εἰ ἔστιν, 89b24–25). For Aristotle, as for Plato before him, the 'What?' question asks for a definition. Definition is supposed to determine the essence of the object under study, separating it from all other things that may have similar features but are nevertheless different. In the present case, defining memory requires us to separate it not only from recollection (ἀνάμνησις) — a distinct activity, though based on memory — but also from the kinds of *phantasiai* such as dreams that derive from one's own earlier sense perceptions, but do not constitute memories. However, we cannot define memory merely by making formal divisions between the various psychological phenomena and determining the attributes that are distinctive of memory. That is because memory, for Aristotle, is a natural phenomenon that arises in certain specific conditions and is common to

1 All translations from Aristotle's texts are mine. In producing the translations, however, I have consulted some widely used translations in English, German and French. For Aristotle's Greek texts, I use David Ross's *Metaphysics,* 2 vols. (Oxford: Clarendon Press, 1924), *Parva naturalia* (Oxford: Clarendon Press, 1955), *De anima* (Oxford: Clarendon Press, 1961), and *Analytica priora et posteriora* (Oxford: Clarendon Press, 1964). The *Parva naturalia* includes among other treatises the *De sensu et sensibilibus*, *De memoria et reminiscentia*, *De somno et vigilia*, and the *De insomniis*, which I refer to in the present chapter.

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Memory and Recollection in the Aristotelian Tradition: Essays on the Reception of Aristotle's *De memoria et reminiscentia*, ed. by Véronique Decaix, Christine Thomsen Thörnqvist, Turnhout, 2021 (*Studia Artistarum*, 47), p. 27-44
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body and soul. Therefore, it is necessary to explore why memory arises, and which part of the soul it belongs. In Aristotle's view, then, we need to answer the other two questions as well. That is why the method of division (διαίρεσις), even if it is helpful in determining the defining attributes, does not enable us to complete an inquiry into a natural phenomenon.[2]

Although the three questions just described are clearly stated in the beginning of the treatise, it is not as clear whether the subsequent discussion addresses the questions adequately; that is, it is not clear whether the subsequent discussion follows the methodology that Aristotle outlines for the study of natural phenomena in his methodological writings, in particular *APo*. 2, *Metaphysica* (*Metaph*.) books 7–9, and *De anima* (*DA*) 1.1. A major concern amongst Aristotle's interpreters is that the only answer that the concluding account, or 'definition', which Aristotle gives at the end of *Mem*. 1, spells out in detail is the answer to the 'What?' question, suggesting that memory consists in "having a phantasm taken as an icon" (451a15–16). This can be referred to as the formal cause of memory. However, the account leaves much to be desired regarding the other relevant causes. While the answer to the 'Which part?' question, that is, the material cause, is given vaguely in terms of "the primary perceptual capacity, and that by which we perceive time," the answer to the 'Why?' question concerning the efficient cause is generally thought to be missing.[3]

The interpretation that Aristotle's concluding account makes no reference to the efficient cause is supported by a certain understanding of the way in which Aristotle uses the term "icon" (εἰκών) in the *Mem*. Although Aristotle claims that phantasms derive from sense perception and other sensory affections, interpreters do not take this point about efficient causality to explain why the memory phantasm is the kind of phantasm it is (that is, an icon). Instead, they suggest that the phantasm in memory is the kind of phantasm it is because the subject of memory views it as an icon, that is, as a copy or representation of a past item. The suggestion is not that the subject of memory considers all phantasms as representations of something else. Instead, it is suggested, she considers some phantasms as phantasms in their own right, similar to the way in which we look at a picture when we pay attention to its visual properties. By contrast, when we take that picture to represent something else, we view it as an icon. The same applies to Aristotle's account of memory phantasms, or so the interpretation claims. If this interpretation is correct, the subject of memory

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2 In *APo*. 2.13–18 Aristotle presents the method of division as a way of inquiry not only into the 'What?' question, but also into the 'Why?' question. In Aristotle's view, the two questions cannot be addressed independently of each other because we specify the answer to the 'What?' question by answering the 'Why? question. On the relationship between the two, see also *APo*. 2.2, 90a14–17. Nevertheless, the method of division needs to be supplemented by an inquiry into the matter of the object under study because divisions only concern the attributes of the object, and not the subject that these attributes belong to. In this paper, I assume that matter can be studied along the lines suggested in *Metaph*. 8.4 and *DA* 1.1.

3 See, e.g., Richard King, *Aristoteles: De memoria et reminiscentia* (Berlin: Akademie Verlag, 2004), p. 109: "Die dritte Frage, durch welche Ursache das Gedächtnis entsteht, wird hier außer Acht gelassen (vgl. aber 450a25–451a14)." I shall discuss the passage King refers to in sections 4 and 5.

remembers a past item just in case she takes a phantasm that she has retained from that item as representing the item.[4]

The interpretation proposed is mistaken, however. That is because remembering, according to Aristotle, cannot require taking a phantasm in a certain way. Should taking a phantasm in a certain way be a requirement, it would be difficult to explain how non-rational animals can remember anything because they are not capable of comtemplating or reflecting on (θεωρεῖν) their phantasms, which is a function of the capacity for thinking rather than of the capacity for *phantasia*. Yet, Aristotle does not see a difficulty in attributing memory to non-rational animals. We can see the mistake described clearly if we set Aristotle's discussion of the three questions in a proper methodological context. The basic problem with the interpretation just given is that it ignores the broader methodological context in which the three questions are motivated. As a result, the interpretation fails to see the implications of Aristotle's causal account of phantasms for his account of memory.

My aim in the present chapter is not to resolve all the many issues concerning Aristotle's explanatory approach in the *Mem.*, nor to present a comprehensive argument for a new interpretation of that work. Instead, I shall attempt the more limited task of investigating how Aristotle's discussion of the 'What?', 'Which part?', and 'Why?' questions can be interpreted from a methodological point of view. I shall pay special attention to the methodology that Aristotle outlines in *Metaph.* 8.4, and applies to the study of sleep in the *De somno et vigilia* (*Somn.Vig.*), for example.[5] I shall argue that Aristotle applies the causal model introduced in *Metaph*. 8.4 to explaining memory. If this is correct, it is easy to see that Aristotle's concluding account of memory implies an answer to the 'Why?' question, too. Even though the other methodological writings and the *Somn.Vig.* help to elucidate Aristotle's causal model, I shall not extend my discussion to these sources because the interpretation proposed does not require that.

2. Affections That are Common to Body and Soul

For Aristotle memory is one of those affections (πάθη) that are common to body and soul. In what follows, I shall call these affections "shared affections." What is

4 Richard Sorabji, *Aristotle on Memory*, 2nd ed. (London: Duckworth, 2004), p. 9, formulates the interpretation with the necessary background in this way: "The question explicitly raised is: how can perception of an image, which is present, yield memory of something which is absent (450b11–20)? The answer is (450b20–451a16) that just as one can view a picture as a thing in its own right, or as a picture *of* something, so one can regard an image as a thing in its own right, or as being *of*, i.e., as being a copy of, something. The latter is what one does when remembering." For others following Sorabji's interpretation, see, e.g., Helen Lang, "On Memory: Aristotle's Corrections of Plato", *Journal of the History of Philosophy*, 18 (1980), pp. 379–93 (p. 391); King, p. 51; David Bloch, *Aristotle on Memory and Recollection: Text, Translation, Interpretation, and Reception in Western Scholasticism* (Leiden and Boston: Brill, 2007), pp. 69–70.

5 For an extensive discussion on how Aristotle applies the causal model of *Metaph*. 8.4 to the study of sleep, see Alan Code, "The 'Matter' of Sleep," in *Theory and Practice in Aristotle's Natural Science*, ed. by David Ebrey (Cambridge: Cambridge University Press, 2015), pp. 11–45.

peculiar about shared affections is that they are to be attributed to the living being as a composite of body and soul rather than to the soul or its capacities taken apart from the body. The subject of an affection is thus the entire living being understood as a hylomorphic composite, or a part of it, rather than the soul itself or one of its capacities, such as the perceptual capacity. It is unclear whether Aristotle posits affections that belong exclusively to the soul, thoughts being obvious candidates (*DA*. 1.1, 403a8), but this issue need not be addressed for the present purposes.

In the beginning of the *De sensu et sensibilibus* (*Sens.*) Aristotle says that shared affections include "sense perception, memory, passion, appetite, and desire in general, and even pleasure and pain" (436a8–10). There he also makes some general observations concerning the study of such affections. First, he contrasts such a study with the study of the soul itself and its capacities. The contrast implied is far from clear, but it seems that the study of the soul and its capacities concentrates on determining what the soul and its capacities are — a study the *DA* pursues at length — whereas the study of shared affections has a broader scope. Aristotle outlines this study already in *DA* 1.1, claiming that such affections are "embodied formulae" (403a25). He takes as an example becoming angry, which he characterises as "a change of a body, or a part or capacity of a body, because of something for the sake of something" (403a26–27). Therefore, the aim of the study of a shared affection is to address the 'What?', 'Which part?' and 'Why?' questions, and, furthermore, a 'For what purpose?' question that asks for the final cause. In the case of memory, however, Aristotle does not indicate that there is a final cause apart from the formal cause.

A second general observation Aristotle makes in the beginning of the *Sens.* is that some affections that are common to body and soul "appear in conjunction with sense perception, whereas others are due to sense perception" (436b3–4). The affections that appear in conjunction with sense perception are presumably pleasures and pains, whereas the affections that are due to sense perception are *phantasiai* of different types, including memory. Desires may appear in either way. The preposition translated "due to" (διά) expresses here causal dependency. In *DA* 3.3 Aristotle uses another preposition (ὑπό) with the same meaning when he characterises *phantasia* as "a change that is due to the activity of a sense" (429a1–2).[6] I understand him to reply to the 'Why?' question, understood as the question of why *phantasia* occurs, by using this expression. In this line of interpretation, then, the efficient cause of memory can be regarded as sense perception, or rather the change that is produced by sense perception and which remains in the senses even when the sensible items are no longer present to the senses (cf. *De insomniis* 2, 459a25–b23). The qualification that the efficient cause of memory is the change that is produced by sense perception rather than the sense perception itself is necessary because in *APo*. 1.13 Aristotle requires that the cause be coextensive with the effect; in the present case, sense perception fails to satisfy this requirement.[7] It fails to satisfy the requirement because it occurs

6 The same account is given in, e.g., *De insomniis* (*Insomn.*) 1, 459a17–18.

7 See *APo*. 1.13, 78b13–31. For a recent discussion, see Lucas Angioni, "Causality and Coextensiveness in Aristotle's *Posterior Analytics* 1.13", *Oxford Studies in Ancient Philosophy,* 54 (2018), pp. 159–85.

before memory. Hence, it is the change that is produced by sense perception that is coextensive with the memory affection. This point has been overlooked in earlier research, but it is important for understanding Aristotle's explanatory approach.

Before we consider this matter in more detail, it is worthwhile to point out a further distinction Aristotle makes between the various kinds of affections in the present context. He claims that "some are affections of sense perceptions, whereas others are states" (*Sens.* 1, 436b4–5). The former presumably include various kinds of desires, pleasures, and pains, whereas the latter are various kinds of *phantasiai* based on sense perception. Memory is an example of such a state (ἕξις). In *Mem.* 1 Aristotle gives an initial account of memory as follows:

> Memory is thus neither perception nor thought, but a state or affection *based on one of these* when some time has elapsed (449b24–25).

Just before this passage, Aristotle has established that memory cannot be sense perception (αἴσθησις) because memory, unlike sense perception, concerns the past rather than the present. He has also established that memory cannot be identified as thinking, or belief (ὑπόληψις), because we do not say that one remembers an object of thought when one is engaged in thinking. That is why memory is about the past, regardless of whether it concerns sensible or intelligible items. However, a little later, Aristotle shows that memory does not belong to the capacity for thinking, except incidentally (κατὰ συμβεβηκός, 450a13a–14). That is why he suggests that the intelligible items are objects of memory only incidentally (450a24–25).[8] In the present context, however, he is content with claiming that memory is a state (ἕξις) or affection (πάθος) that is based on sense perception or thought when some time has elapsed.

In the foregoing, I have understood the genitive τούτων τινός that is attributed to the state and affection as a genitive of source, rendering it as "based on one of these." Alternative translations with the same meaning include "deriving from one of these" and "resulting from one of these."[9] Some translators prefer to leave the

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8 Aristotle refers to the intelligible items as "those that do not occur without *phantasia*" (450a25). That is because he assumes that "it is impossible to think without a phantasm" (449b31–450a1). In this context, Aristotle does not explain what he means by the term "incidentally" (κατὰ συμβεβηκός). However, my interpretation is as follows. A person remembers an object of thought incidentally if that object coincides with a sensible object that the person remembers in and of itself (καθ' αὑτό). Furthermore, the object of thought does not affect the capacity for remembering insofar as that object is intelligible. For instance, I remember the essence of circle incidentally if that essence coincides with a visible circle which I remember in and of itself. Furthermore, the essence of circle does not affect my capacity for remembering insofar it is an essence. This interpretation can be justified by an analogy with Aristotle's account of incidental perception. In *DA* 2.6, 418a20–24, Aristotle suggests that I perceive an object, for example, the son of Diares, incidentally if he coincides with a white thing that I see by sight. Additionally, the son of Diares does not affect the sense of sight insofar as he is the son of Diares. That is because being a son of someone is an intelligible rather than sensible feature. For the same reasons, I assume that being Coriscus is an intelligible item, and that one can have an icon of Coriscus only insofar as his sensible features are concerned; see *Mem.* 1, 450b31.

9 For "resulting from one of these," see Bloch, p. 27.

meaning of the genitive indeterminate,[10] but I think the context gives us sufficient grounds to decipher the expression in causal terms. Additionally, memory can be said to concern the perceptions and thoughts that give rise to it. Hence, the genitive in question could also be read as an objective genitive. I do not see the two interpretations as mutually exclusive. In fact, the preceding four lines lend support to the objective interpretation. There Aristotle claims: "Whenever one is active with respect to remembering, one says in one's soul to the effect that one has previously heard, perceived or thought about the matter in question" (449b22–23). This claim refers to the kind of time perception that is involved in remembering. Even though I cannot go into that topic in the present paper, I shall nonetheless, in section six, relate this claim to another similar claim that Aristotle makes a little later at 450a19–21.

The foregoing discussion has shown that Aristotle takes memory to be an affection that is common to body and soul. The discussion has also shown what questions, in Aristotle's view, are relevant to the study of shared affections. However, it has not yet been shown how Aristotle thinks addressing these questions helps us to define some one thing rather than several distinct things. The issue, then, is how the different causes, as answers to the 'What?', 'Why?', 'Which part?', and 'For what purpose?' questions, determine a single natural phenomenon such as memory. The issue is important because definition should single out just one thing rather than several distinct things.

Aristotle addresses the unity issue just raised from a general point of view in *Metaph.* 8. There he shows that even if each science has its own principles — natural science, for example, inquires into objects that are subject to movement and change — it is possible to consider the causal approach used in natural science from a more comprehensive point of view that explains how the object of definition constitutes a unity rather than several distinct things. It falls outside the scope of the present chapter to attempt a full treatment of Aristotle's discussion that extends from substances to their attributes.[11] In what follows, I shall limit my attention to *Metaph.* 8.4, in which Aristotle considers attributes of substances such as lunar eclipses and sleep. I shall make some observations on how Aristotle conceives of the matter of these items, but am particularly interested in determining how he sees the relationship between the efficient cause and the formal cause because that is crucial to understanding how he accounts for the various kinds of phantasms in the *Mem.* I shall argue that Aristotle takes the efficient cause to determine what kind of form is involved in a natural phenomenon such as memory.

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10 For instance, René Mugnier, *Aristote. Petits traités d'histoire naturelle* (Paris: Les belles lettres, 1953), p. 54, translates the expression as "de l'une des deux," Sorabji, p. 48, as "connected with one of these," and King, p. 13, as "einer dieser beiden."

11 For a recent discussion of the *status quaestionis* with references to literature, see Pierre-Marie Morel, *Aristote. Métaphysique Livre Ètа* (Paris: Vrin, 2015), pp. 41–59.

3. Inquiry into All the Possible Causes

In *Metaph.* 8.4 Aristotle states the following general methodological principle: "When one inquiries into the cause, one should state all the possible causes, because causes are spoken of in several senses" (1044a32–34). To illustrate the principle, he refers to the various causes of man:

> What, for example, is the material cause of man? The menstrual fluid. What is the moving cause? The semen. The formal cause? His essence. The final cause? His end. (1044a34–b1)

This account is not to be taken as conclusive. Aristotle cautiously points out that the formal cause and the final cause may be the same in this case. His comment indicates that further research is required for determining whether that is indeed the case.

Aristotle introduces a second important methodological principle. He claims: "We must state the proximate causes" (1044b1–2). He clarifies this point by reference to the material cause. He says that neither fire nor earth constitutes the material cause, but the matter peculiar to each thing. In the case of man, as Aristotle notes, the matter is the menstrual fluid; and, once the embryo develops, the matter must be the body with its various organs. But the priority of proximate causes, I take it, also applies to the other causes. Even if it is true to say that man begets man, the reference to a man does not give us the proximate moving cause. That is why Aristotle refers to the semen as the moving cause of man.

Thus far, the discussion has concerned natural substances that are subject to generation and corruption. Aristotle proceeds to consider other kinds of natural phenomena, singling out two distinct cases. He says that those natural substances that are eternal may not have matter at all, or may only have the kind of matter that enables them to move with respect to place. The reference is obviously to celestial bodies that move in a circle eternally. Aristotle continues: "Nor does matter belong to those things which exist by nature but are not substances, instead that which underlies is substance" (1044b8–9). Here, he has in mind attributes of natural substances. Memory and recollection belong to this category of beings. In the present context, however, Aristotle does not consider these cases, but gives two other examples, lunar eclipses and sleep. First, he denies matter to lunar eclipses, but admits that "the Moon is that which suffers eclipse" (b10–11). He then applies the same explanatory approach to sleep. In that case, however, he discovers an obscurity. He poses the question whether that which primarily undergoes sleep is the living being or some part of it, such as the primary perceptual capacity, which resides in the heart. Although Aristotle does not answer the question, the principle that advises giving a proximate cause for each thing suggests that one should prefer the latter option. And indeed that is what Aristotle does in the *Somn.Vig.*, where he assigns sleep to the primary perceptual capacity.[12]

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12 *Somn.Vig.* 2, 455b8–13 and 455b34–456a24. For discussion, see Morel, pp. 171–73.

The claim that the attributes of natural substances lack matter requires further clarification. First of all, we need to know why Aristotle makes this claim. He does not discuss this question in *Metaph*. 8.4, but in the subsequent chapter he addresses the question in some detail. He claims that only those things that come to be and pass away or change into one another have matter. Such things include natural substances such as a white man who may change in respect of colour as the result of sunbathing, or pass away as the result of a disease or old age. By contrast, those things that do not come to be and pass away or undergo change have no matter. These things include attributes that constitute opposites such as being white and being black. They do not come be or pass away, nor do they change into each other. It is rather the subject of these attributes that changes with respect to them.

Secondly, we need to know what natural attributes have instead of matter. Aristotle refers to this substitute for matter as that which underlies, or as a substrate (τὸ ὑποκείμενον). He also refers to it as that which undergoes change (τὸ πάσχον). The substitute for matter is paired with the agent of change that I have above called the efficient cause or the moving cause. The substitute for matter is that which the agent of change acts upon. Further, when the substitute for matter is thus acted upon, it receives one of the opposite attributes such as being white or being black. In *De generatione et corruptione* 1.4, by contrast, Aristotle refers to the underlying thing as matter in all cases of alteration. He says that even if matter in its primary sense consists in that which is subject to generation and corruption, the things that undergo other kinds of changes also constitute matter in a certain way (320a2–5). Therefore, the designation "matter" applies not only to the substrate of generation and corruption, but also to that of movement and change.

In addition to clarifying the role of matter in natural attributes, Aristotle sheds further light on the relationship between the various causes. In the beginning of *Metaph*. 8.4, he observes that one kind of matter can give rise to different kinds of things if it is acted upon by different kinds of efficient causes (1044a25–27). Wood, for example, can be made a chest or a bed. What is decisive here is the way in which the carpenter works on the matter. By working in one way she can produce a chest, whereas by working in another way she can produce a bed. Hence, the way in which the carpenter works on the matter determines which kind of form the piece of wood takes on as the result of the production process.

Towards the end of 8.4 Aristotle takes a similar approach to clarifying the relationship between the formal cause and the efficient cause. He remarks: "Regarding the form, the cause is the account, but the account is unclear unless it is accompanied by its cause" (1044b12–13). To illustrate this, he gives the following example:

> What is an eclipse, for example? 'Loss of light'. However, if one adds 'due to the Earth intervening', this is the account together with the cause. (1044b13–15)

Aristotle assumes that there is not only one efficient cause that can give rise to loss of light, but rather many different kinds. In *APo.* 2.9, 93b3–6 he points out that loss of light can be due to the Moon turning around or to the extinction of light, for example. Therefore, it makes a difference to loss of light how it is brought about. Unless we specify the kind of loss of light that is distinctive of lunar eclipses, the account we

give remains unclear. Hence, the reference to the Earth intervening as the efficient cause is crucial in defining lunar eclipses because it disambiguates the formal account "loss of light." It can be concluded that a lunar eclipse is the kind of loss of light that is due to the Earth intervening between the Sun and the Moon, rather than due to the Moon turning around or to the extinction of light.[13]

The way in which Aristotle links the various causes to each other helps us to see why those causes determine a single phenomenon rather than several distinct phenomena. A lunar eclipse, for Aristotle, is not just any loss of light that coincides with the Earth intervening between the Sun and Moon. The two are not distinct phenomena, but constitute a unity. The loss of light in question depends for being what it is on the Earth intervening. The assumption, then, is that there is no other kind of efficient cause that can produce the loss of light peculiar to lunar eclipses. That is because the Earth intervening constitutes part of what it is to be that kind of loss of light. Aristotle does not explain how the Earth as a singular causal agent can be part of a definable natural phenomenon — perhaps he assumes instead that any Earth-like type of object will do here, and that the same applies to the Moon. However, the crucial point is that the kind of loss of light in question is different from all other relevant kinds. The same applies to artefacts. A chest is the kind of wooden object it is because a carpenter has produced it from wood by using her hands and tools in a certain way. Of course, a similar chest can be made from wood in an automatised factory. Yet, the product is only similar in appearance, not the same in kind, because the method of production that determines the kind of product is different in the two cases. A chest that is made by a carpenter is handmade, and this feature separates the product from the similar ones made in a factory. Therefore, being a handmade chest depends for being what it is on the carpenter having produced that item. Like all other artefacts, the chest also has a final cause, but we need not discuss that matter for the present purposes.

The foregoing considerations show how closely Aristotle relates the formal and material causes to the efficient cause. In giving examples of natural substances and their attributes as well as artefacts, he assumes that the same explanatory approach is applicable to all cases. In the subsequent section, I shall show how that approach helps him to separate memory affections from other kinds of affections. In other words, I shall show how addressing the 'What?' question requires an answer to the 'Why?' question.

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13 For a comparable discussion of the question of why thunder occurs (διὰ τί βροντᾷ), see *Metaph*. 7.17, 1041a24–25, and *APo*. 2.10, 94a4–7. In *APo*. 2.2, 90a2–7, Aristotle claims that giving an affirmative answer to the question of whether a certain thing is such-and-such involves an inquiry into the question of why that thing is such-and-such. A little further, at 90a14–18, he even suggests that what it is to be a certain thing and why that thing occurs are the same thing. For instance, a lunar eclipse consists in the loss of light being due to the Earth intervening, and the reason why it arises is that the Moon is deprived of light because of the Earth intervening. For a detailed discussion, see David Charles, *Aristotle on Meaning and Essence* (Oxford: Clarendon Press, 2000), pp. 23–56 and 197–220; Kei Chiba, "Aristotle on Heuristic Inquiry and Demonstration of What It Is," in *The Oxford Handbook of Aristotle,* ed. by Christopher Shields (Oxford: Oxford University Press, 2012), pp. 171–201 (pp. 195–97).

4. Memory Affection Being Due to Sense Perception

Having established that memory belongs to the same part of the soul as the capacity for *phantasia*, giving thus an answer to the 'Which part?' question, Aristotle proceeds to discuss the question of why memory arises. He comes to the 'Why?' question by way of addressing a more specific question as to how we remember something that is not present to the senses. That question is relevant because, as Aristotle notes, it is only the affection that is present, whereas the thing the affection concerns is not. In addressing the question, Aristotle specifies the initial account (449b24–25) that was discussed above as follows:

> For it is obvious that one must regard the affection that is due to sense perception in the soul and in that part of the body which has the soul, and the having of which we call memory, as being a sort of picture; for the change that occurs stamps as it were, a kind of imprint of the percept, just as people do when they make a seal with a signet ring. (450a27–32)

Aristotle restates here two points that he has made before. First, he reminds the reader that memory involves a certain affection that is common to body and soul. The way in which he puts this point, by saying that the affection resides "in the soul and in that part of the body which has the soul," is perplexing. Some scholars such as David Ross have taken this expression to be incompatible with the view, put forward in *DA* 2.1, that the soul is a certain actuality of the body.[14] That goes too far, however. By using this expression, Aristotle's point is only to remind the reader that the affection involved in memory belongs to the kind of affections that are common to body and soul. In *Sens.* 1, as we have seen, he counts memory among these.[15] Second, Aristotle points out that memory is to be identified not as sense perception, but as a certain state (ἕξις) that is due to sense perception. Since that state is referred to as an affection, he implies that it consists in having or retaining an affection.

In addition to the two points just mentioned, Aristotle makes a novel point here about the memory affection as being some sort of picture (οἷον ζωγράφημά τι). This should be interpreted in a loose way. Aristotle is not suggesting that the memory affection is a kind of picture. It cannot be a picture because we have not only visual, but also auditory, olfactory, tactile, and taste memories.[16] Furthermore, Aristotle is interested only in certain features of a picture. To clarify the matter, he proposes an analogy: just as people make a seal with a signet ring, so does a change that derives from sense perception make an impression (τύπος) of an item perceived. The analogy suggests that Aristotle is focusing on those features of a picture that replicate or preserve the sensible form of the original. That is because he wishes to explain how we can remember the sensible object that we have perceived earlier,

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14 Aristotle, *Parva naturalia*, p. 16, and id., *De anima*, p. 10.

15 See also Sorabji, p. 81.

16 Hence, I disagree with Bloch, pp. 67–70, who argues that Aristotle takes memory phantasms to be exclusively visual.

but which is no longer present to the senses. Therefore, the analogy is supposed to explain how that which is perceived can be retained for memory.[17] The proposal Aristotle makes is straightforward: just as the mark of the signet ring is retained in a waxen block even when the ring is removed, so is the impression of the thing perceived retained somewhere in the person who remembers even when the sensible item is gone. It is worth noting that this proposal is a continuation of the signet ring analogy that Aristotle uses in accounting for the sense receiving sensible forms without matter in *DA* 2.12, 424a17–24. But I do not think Aristotle gives an account of the formal features of the memory affection as representational in any of those ways that representationality is understood by contemporary philosophers. That is because his theoretical framework is entirely different from the framework in which representational theories are developed. Since we can give a reasonable interpretation of the signet ring analogy without using the term "representational," we had better avoid using this term.[18]

Before I discuss the suggested interpretation in more detail, I will draw attention to one further point in the citation above. There Aristotle says: "One must regard the affection … as being a sort of picture" (450a27–30). This raises the question of whether remembering requires the subject to take the memory affection to be a sort of picture. In other words, the question is whether the subject of remembering is required to consider the affection as being a sort of picture. The verb νοῆσαι I have translated here as "regard" refers in most contexts in Aristotle to intellectual understanding. That is why the question just raised is not entirely pointless, and an affirmative answer must be taken seriously into consideration. There are two problems with this line of interpretation, however. First, if the interpretation were correct, Aristotle would limit his study to the kind of memory that is available only to human beings with intellectual understanding. Limiting the scope of study in this way without further notice would be surprising in the present context, however. No more than ten lines earlier, Aristotle has attributed memory to the perceptual capacity because it belongs to many animals other than human beings. Secondly, even if Aristotle confined himself to studying the memory that is peculiar to rational beings here, it would be unnecessary to assume that regarding the affection as a sort of picture is a requirement for memory. A more cautious alternative interpretation is that remembering is accompanied by that kind of higher-order reflection in the

17 In some places, e.g., *DA* 3.8, 432a9, Aristotle refers to that which is perceived as a percept (αἴσθημα). It becomes a phantasm (φάντασμα), I assume, if it is retained, along with the affection (πάθος) produced by the sensible item, in a sense organ and the heart as the central sensorium when the sensible item is no longer present to the sense. For an extensive account of how the affection persists in the sense organ when the sensible item is gone, see *Insomn.* 2, 459a24–b23.

18 That is why I do not follow Stephen Everson, *Aristotle on Perception* (Oxford: Clarendon Press, 1997), p. 193, for instance, when he claims: "In the *De Memoria*, Aristotle raises the question of how it is possible to remember what is not present and, in the course of answering this, gives some explication of the representational nature of *phantasmata*." The problem is that Everson takes the concept of representation for granted. However, that concept is theoretical, and cannot therefore be transferred from one context to another without qualification.

case of human beings. Furthermore, by saying: "One must regard the affection … as being a sort of picture," Aristotle may merely be advising the reader to interpret the affection as being a sort of picture. Understood this way, the verb νοῆσαι can be taken to mean understanding in the sense of interpreting, and the implied subject of this verb is the reader rather than the person who remembers.[19] In the subsequent section, I shall review some further considerations, based on *Mem.* 1, 450b12–27, that are taken to support the interpretation that remembering requires taking the affection as being a sort of picture.[20]

I proceed to study the analogy that Aristotle proposes between signet ring marks and memory impressions in more detail. By proposing the analogy, I argue, Aristotle attempts to account for memory in causal terms. In this regard, making a stamp offers an illuminating point of comparison. Just like any other change for Aristotle, making a stamp requires three things: an agent, a patient, and the affection brought about. In the case of stamping, the agent is the signet ring that is used by a person who issues the stamp. The patient is a waxen block, for example, in which the signet ring is pressed. The affection brought about is the mark that the block takes on when the ring is pressed upon it. Now, the analogy suggests that the formation of memory requires three things: an agent, a patient, and the affection brought about. The first factor, the agent, is the change that derives from sense perception and which remains even when the perceptible item is no longer present to the senses. The second factor, the patient, is not clear from the account Aristotle gives. Immediately after the passage quoted above, however, he proceeds to discuss the conditions under which the memory affection can be retained. Judging from this discussion, one alternative is the person who is the subject of memory. Aristotle notes that the very young and the very old people have poor memories because they are in a state of flux: the young because they are growing, and the old because they are decaying. A second alternative can be found in the account with which Aristotle concludes *Mem.* 1. There Aristotle relates memory to the primary perceptual capacity. To all appearances, that capacity, with heart and blood as its organ, can be called the proximate material cause of memory. The third item, the affection brought about, is the impression that is caused by the change due to sense perception. Aristotle points out that the patient must be of the right kind in order for a memory affection to arise. In some cases, such as the young and the old, sense perception fails to issue in the relevant kind of affection. In the case of the young, that is because it is "as though the change or seal were applied to running water" (450b2–3), whereas in the case of the old that is "because of detrition like that of old walls in buildings, or because of the hardness of that which takes on the affection" (b3–5).

19 For this usage of the verb νοῆσαι, see, e.g., *Sens.* 5, 442b27.

20 I criticise that interpretation extensively in a work in progress. However, the arguments that I put forward in the present paper suffice to show that there is an alternative that is plausible both in textual and philosophical terms.

5. Two Kinds of Phantasms: Icons and Mere Phantasms

The foregoing discussion shows that the memory affection constitutes a certain kind of affection that is based on sense perception. That is not to say that all affections that derive from sense perception qualify as memories. In the *De insomniis* (*Insomn.*) Aristotle points out that even if dreams derive from sense perceptions, they do not constitute memories.[21] In line with this, Aristotle separates, in the *Mem.*, memory affections from other affections. He draws this distinction by reference to two different ways of being a phantasm (φάντασμα) and of interpreting a phantasm. He states:

> For just as the animal drawn on a board is both an animal and an icon (they are one and the same, yet their being is not the same), and just as it is possible to contemplate it both as an animal and as an icon, so also the phantasm that occurs in us[22] must be taken to be both something in itself and of something else. Insofar as it is something in itself, it is that which is contemplated or that which appears, while insofar as it is of something else, it is as if it is an icon, i.e.,[23] that which is remembered. (450b20–7)

This passage is part of Aristotle's discussion on how it is possible to remember something that is past by perceiving an affection that is present (450b14, 16). The details of this discussion need not concern us for the present. What is relevant here are the two distinctions that Aristotle draws.

First, by using an analogy with a drawn animal that is "something in itself" (αὐτό τι καθ' αὑτό) and "of something else" (ἄλλου), Aristotle suggests that a phantasm can be something in itself and of something else. By "something in itself," Aristotle refers to the phantasm as that which appears to the subject. It is a specific way in which a sensible object presents itself to the subject, whether it be real or not.[24] By "of something else," Aristotle refers to the phantasm as being derived from something else, namely a sense perception and ultimately an external sensible object.

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21 See, e.g., *Insomn.* 3, 460b28–32.

22 By "in us" (ἐν ἡμῖν) at 450b24, Aristotle reminds the reader that the things in analogy are of a different type. Drawing is an external entity, the existence of which is not dependent upon us who are looking at it. By contrast, a phantasm is an entity that comes about only through our perceptual activity. In this sense, then, phantasm is "in us", or "in the soul" (450b10–11).

23 I assume that this is an epexegetic καί.

24 In giving this interpretation I am not making the further claim that the subject can remember a past sensible object *because* she is aware of a phantasm. This claim is analogous to the claim that the subject can perceive a present sensible object *because* she is aware of a percept (αἴσθημα). For these claims that make Aristotle a sense-datum theorist, see Everson, pp. 177–78: "The external object acts on the sense organ so as to produce an *aisthēma*, which is then transmitted to the central organ. The subject perceives the external object because he is aware of that *aisthēma*. What Aristotle's general account of the workings of the *aisthētikon* allows for is that one can be aware of its affections when these have not been brought about by the action of an external perceptible object on the sense organ — in which case, the affection will be not an *aisthēma* but a *phantasma*."

The genitive in question (ἄλλου) is thus best understood as a genitive of source.[25] This is how Aristotle manages to give a causal account of memory. Hence, insofar as the phantasm is of something else, it is a memory phantasm, whereas insofar as the phantasm is merely something in itself, it is a mere phantasm, that is, any old phantasm that may but need not derive from one's own earlier sense perception. Aristotle refers to the memory phantasm as an icon (εἰκών), that is, a likeness of the original. That is because he wishes to emphasise that the memory phantasm is related to reality in a specific way: it preserves the received sensible forms in proportion to the original.[26] Thus, I do not assume that by being of something else, and by being an icon, the phantasm acquires the capacity for representing an external object, real or non-real, in the first place.[27]

Second, Aristotle draws a distinction between two ways of interpreting a phantasm. Just as one can contemplate or study (θεωρεῖν) a drawn animal as being something in itself and as being of something else, so can one contemplate a phantasm in two different ways: either one can take it to be something in itself, or one can take it to be of something else. This does not imply that whenever we experience a phantasm, we contemplate it in one of the two ways. Therefore, it is reasonable to conclude that contemplating a phantasm is an activity that is distinct from experiencing a phantasm, including the experience that is having a memory phantasm.

That Aristotle makes the distinction between contemplating a phantasm and experiencing a phantasm is clear from what he says about mistakes regarding phantasms. In reference to Antipheron of Oreus and some other people out of their senses, Aristotle says: "They took that which appeared to them as that which has happened and as if they were remembering it" (451a10–11). He adds: "This takes place when one contemplates that which is not an icon as an icon" (451a11–12).

The foregoing considerations suggest that remembering does not require that one contemplates a phantasm as being an icon. Some scholars contest this claim, however. Their argument is the following. The phantasm that is "something in itself" (αὐτό τι καθ' αὑτό) is like a drawing, an object of study (θεώρημα) in its own right,

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25 For the same interpretation, see Victor Caston, "Aristotle and the Problem of Intentionality," *Philosophy and Phenomenological Research*, 58 (1998), pp. 249–98 (p. 282, n. 80).

26 For a comparable use of the term "icon" (εἰκών), see Plato, *Sophist* 235c9–236b8 (in *Platonis Opera*, ed. by Elisabeth A. Duke and others, vol. 1, Oxford: Clarendon Press, 1995).

27 This interpretation is to be contrasted with the representational interpretation, according to which Aristotle's usage of the expression "of something" is evidence for his applying the representational notion 'being about' (in a referential sense). However, the evidence is very weak because the expression "of something" can be given the alternative causal interpretation as suggested above. Therefore, one should adduce more evidence to convincingly show that Aristotle possessed the kind of conception of 'being about' that is applicable not merely to memories but also to other kinds of mental states, including sense perceptions. I doubt that Aristotle had such a conception. In fact, some of those who are committed to the representational interpretation of memory raise the same doubt. Here is what Everson, p. 193, says about Aristotle's approach in the *De anima*: "What does not concern him is the question of how perceptions can represent the world at all. Although we can find some reflections on this in the treatises of the *Parva naturalia*, these are not occasioned by the thought that they have a necessary place in the theory of perception itself."

while the phantasm that is "of something else" (ἄλλου) is an icon, a copy of an external object such as the thing remembered (μνημόνευμα). Therefore, it is argued, only the phantasm that is "of something else" represents an external object. Furthermore, it is argued, the phantasm does not represent that object unless the phantasm is taken in that way. The argument, then, is that for a phantasm to represent anything it must be considered as being an icon. That is why remembering a past item requires that one take the phantasm to be an icon.[28]

I find the interpretation just outlined mistaken. I have already remarked that this interpretation fails to explain how non-rational animals are capable of memory. If remembering required the subject to consider the phantasm as being an icon, non-rational animals could not entertain iconic phantasms because they lack the required capacity to consider their phantasms as being in a certain way. The capacity for *phantasia*, according to Aristotle, is not a capacity for contemplation (θεωρεῖν). Furthermore, the interpretation encounters a second problem that is even more serious. The problem is that the interpretation implies that those phantasms that are not considered as being of something else are not of something else. In other words, according to this interpretation they lack intentional objects. Even though they can be regarded as pictures in their own right, they do not represent nor do they misrepresent the perceptible items in the reality external to the senses in any way. Hence, the distinction Aristotle draws is taken to be between phantasms that are representations and phantasms that are not representations. However, that distinction does not make good sense in the present context.[29] That is because Aristotle does not intend to explain here how we can be aware of external objects in general. Rather, he intends to explain how we can remember items that are not present to the senses. The proposed distinction between representations and non-representations is useless because it does not help to separate remembering from other mental activities that involve phantasms and concern external objects, such as imagining based on testimony.

6. The Concluding Account of Memory

In this final section, I shall show how Aristotle's concluding account of memory at the end of *Mem.* 1 can be interpreted in light of the considerations given in the preceding sections. Aristotle draws the conclusion in this way:

> It has been stated what memory and remembering are, namely that it is having of a phantasm, taken as an icon of what it is a phantasm of, and it has been stated

28 For references to literature, see n. 4.

29 Here, I agree with Everson, p. 196, when he claims: "The distinction in play is not between representational and non-representational states,' and yet I should like to qualify the way in which he continues: "but between those representational items which are likenesses of something real and those which are not." As noted above, I do not find it helpful to refer to representational items in the present context. Instead, it is preferable to suggest that the distinction is between those phantasms that are likenesses of something real and those which are not.

> to which part of us it belongs, namely to the primary perceptual capacity, and to that by which we perceive time. (*Mem.* 1, 451a14–17)

It is commonly assumed that the account Aristotle gives here is confined to answering only the 'What?' and 'Which part?' questions that are raised in the beginning of *Mem.* 1. In other words, the account only addresses what can be called formal and material causes of memory, and ignores the 'Why?' question that requires indicating the efficient cause. By contrast, I will argue here that the account can be interpreted as in fact also addressing the 'Why?' question that is explicitly posed in the beginning of the treatise and discussed in some detail in *Mem.* 1.

Let us begin with the answer to the 'Which part?' question. Aristotle first mentions the primary perceptual capacity (τὸ πρώτον αἰσθητικόν). By "primary," he means 'principal' or 'commanding' here. This is the capacity that has its seat in the heart and is responsible for coordinating the activities of the single senses. Aristotle assumes that in some animals this capacity is also responsible for phantasms that are required for remembering.[30] In addressing the question, as seen above, Aristotle rules out the only serious rival candidate, the intellectual capacity. The reason why it fails, in his view, is that if it played this role there would be no way to account for the fact that there are some non-rational animals that can remember (*Mem.* 1, 450a13–19). If that is the case, the intellectual capacity cannot be an explanation of memory, or rather, it cannot be *the* explanation of memory. It is worth noting that Aristotle does not consider here the possibility that there might be a certain kind of intellectual memory; this kind of memory is what Aristotle refers to as recollection rather than memory.

Second, Aristotle supplements his answer to the 'Which part?' question by reference to the capacity by which we perceive time (ᾧ χρόνου αἰσθανόμεθα). Allegedly, this is a further capacity belonging to the primary perceptual capacity in some animals that are capable of perceiving. In *Mem.* 2 Aristotle observes that time can be perceived in two different ways: by means of a measure (μέτρῳ) or without measure (452b29–453a4). The former is presumably the prerogative of rational animals, whereas the latter belongs to all animals capable of time perception. Since none of the claims that I have put forward in this paper requires determining what role Aristotle assigns to the perception of time in remembering, I set aside this issue for the present.[31]

Regarding the 'What?' question, Aristotle restates the claim that remembering requires having a certain kind of phantasm, an icon (εἰκών). This account goes further than the initial account at 449b24–25 (that is discussed in section two above) in that it specifies what kind of phantasm is distinctive of memory. It makes clear that memory requires having a phantasm that is an icon.

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30 I thus assume that Aristotle uses the term "primary perceptual capacity" in a broad sense that includes not only the capacity for perceiving by the senses, but also the capacity for *phantasia*. For this broad understanding of the term, see, e.g., Pavel Gregoric, *Aristotle on the Common Sense* (Oxford: Oxford University Press, 2007), p. 56.

31 For a helpful account of time perception, see Gregoric, pp. 99–111.

On the face of it, the concluding account seems to ignore the 'Why?' question. This is a false impression, however. Aristotle specifies the formal account given above by requiring that the icon in question be "of what it is a phantasm of" (οὗ φάντασμα). In scholarly literature, this specification is commonly taken to determine the object that the icon exhibits. Hence, the genitive οὗ applied here is interpreted as an objective genitive. I argue in contrast that the context requires us to read it primarily as a genitive of source. I say "primarily" because I do not wish to deny that the icon presents an object of memory. The expression is thus to be rendered as "from that which the phantasm derives." If this argument holds good, as I have argued it does, Aristotle cannot be understood to overlook the 'Why?' question. Instead, as seen in the previous sections of this paper, he has a considered answer to that question. For Aristotle memory is the kind of phantasm it is because it is caused by a change that derives from sense perception. In this way, then, he limits the scope of phantasms to those that are relevant to memory.

The account given thus far needs some further qualification. Most importantly, the account needs to be confined to those phantasms that derive from one's own sense perception of the object of memory. This limitation is necessary because it does not make sense to claim, for example, that my son remembers himself guiding a sailboat on the pond in the Jardins de Luxembourg just because he has seen a photograph in a family album presenting him as a child doing so. From the fact that he has retained an icon of himself guiding a sailboat on that pond, it does not follow that he has the kind of icon that explains his remembering the event in question. What is further required is that he has that icon based on his own sense perception of the event remembered.

Aristotle does not explicitly make that qualification in the *Mem.* However, there is evidence that he implies the qualification in accounting for the kind of time perception that is required for remembering. He claims, as noted above, that "whenever one is active in remembering, one must say in one's soul that one heard, perceived, or thought that before" (*Mem.* 1, 449b22–23). Thus, Aristotle assumes that the contents of memory derive from one's own earlier perceptions and thoughts. A little later, he restates the point by saying: "As we said already before, whenever one is active in respect of memory to the effect that one saw, heard, or learned this, one perceives in addition that it is earlier, and before and after are in time" (450a19–22). Here Aristotle explicitly claims that remembering is accompanied by a perception of time. At this point, however, he does not explicate what, exactly, that perception consists in and how it relates to intellectual reflection on one's own earlier sense perceptions and thoughts. In this regard, Aristotle's discussion remains incomplete.

To conclude, I have shown in this paper how Aristotle addresses the three questions about memory that he sets out to study in the beginning of the treatise: "What is memory?", "Which part of the soul does memory belong?", and "Why does memory occur?" Even though he discusses each of the three questions, it is generally assumed that the account with which he concludes his discussion is confined to answering only the first two questions. I have argued in contrast that the concluding account implies an answer to the third question, too. To establish that there is indeed such an implication, I have shown how Aristotle employs the methodology that he outlines

in *Metaph.* 8.4 in explaining why memory occurs. His answer to this question is that memory is caused by a change that derives from sense perception. That Aristotle takes memory to be caused by sense perception in the suggested way helps him to determine what is distinctive of memory phantasms, that is, icons. Icons, according to Aristotle, are those phantasms that are derived from sense perception. That is why, I have argued, he considers it appropriate to define remembering in terms of retaining a phantasm that is an icon. I have also argued that remembering, according to Aristotle, does not require taking the memory phantasm to be an icon although that kind of higher-order reflection accompanies remembering in the case of rational human beings who have the capacity for such reflection.[32]

32 This chapter is based on the research that I carried out in my Academy of Finland postdoctoral project "Aristotle on memory" in 2012–2015. An early draft of the chapter was read in the workshop "Soul and living beings. Readings and Reception of Aristotle's *Parva naturalia*" organised by Véronique Decaix and Pierre-Marie Morel at the University of Paris 1 Panthéon-Sorbonne on February 18, 2016. A subsequent draft was discussed in the higher seminar in the history of philosophy at the University of Uppsala on April 26, 2018, when I was working as an Erik Allardt Fellow at the Swedish Collegium for Advanced Study in Uppsala. I am very grateful to the organisers and participants of the two meetings for their generous comments on my work, as well as to the principal, fellows and staff of the SCAS for providing me with a thriving scholarly environment. In finishing the chapter for publication, I have greatly benefited from the written notes by Filip Radovic. In addition to him, I would especially like to thank the editors Véronique Decaix and Christina Thomsen Thörnqvist and the language editor Jordan Lavender whose suggestions led to many improvements on the clarity of my writing.

ALEXANDRA MICHALEWSKI

Writing in the Soul

*On Some Aspects of Recollection in Plotinus**

1. Introduction

In chapter 25 of *Ennead* (*Enn.*), IV.3 (27), Plotinus defines recollection as a very different kind of memory than ordinary memory. Unlike ordinary memory, recollection is timeless and operates on a content that is not acquired by the individual soul but connatural to it. The question of the status of recollection in Plotinus' treatises is a contentious issue, especially since Plotinus does not give any canonical definition of recollection. He uses the term in various contexts, most of the time almost incidentally while mentioning the definitions of the 'ancients'. My hypothesis is that this terminological vagueness is due to the fact that the various definitions scattered throughout the treatises do not refer to the same level of mental activity. I would like to show that this multiplicity of meanings is best understood as an essential characteristic of Plotinus' concept of recollection and not as evidence of logical inconsistency. Indeed, recollection, according to Plotinus, refers to a process by which the individual soul becomes aware of the fact that it has always possessed certain intelligible contents — contents which are often dormant, inasmuch as the soul does not always make use of them. The activation of these contents allows the soul to contemplate the transcendent Forms living in the intelligible world, from whence the soul, by means of its superior, intellective dimension, has never really departed. This global process of ascent towards the intelligible realm consists of

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several stages and, depending on the context, Plotinus may call one or the other of these stages ἀνάμνησις.[1]

Merlan, in his book *Mysticism, Monopsychism, Metaconsciousness*, suggested that Plotinus was a remote precursor to Leibniz in that they shared a similar interpretation of Plato's concept of recollection. According to this interpretation, 'the true meaning of recollection is that a knowledge which we have always possessed, although unconsciously, becomes conscious'.[2] Indeed, Leibniz, in the *Discours de Métaphysique* (chap. 26), showed how the soul draws everything from itself without any messenger species ("espèces messagères") entering the mind from outside. Merlan based his view on a passage of *Enn*., V.9 (5).[3] At this point in the treatise, Plotinus has already established the identity of the divine intellect with the Forms and, in a rather sudden way, he declares "καὶ αἱ ἀναμνήσεις δέ [there are recollections]." At first sight, this close association, which Plotinus does not develop any further, is somewhat surprising; that is, it is surprising that recollection should be related to the identity of the intellect and its objects. Now, if intelligence is always bound to its objects, thinking them continuously, then recollection's ultimate function would be simply to make the soul aware that its essential activity, the contemplation of the transcendent Forms, occurs perpetually at a supra-conscious level.[4]

So, on one side, a large part of the secondary literature focusing on Plotinian psychology[5] has stressed that Platonic recollection was in fact replaced by the so-called theory of the 'undescended soul'.[6] McCumber, for his part, develops a more nuanced reading. According to him, recollection in Plotinus 'has a carefully delimited nature and function: soul has memories of forms (…) and these memories are recovered as soul approaches the intelligible realm'.[7] On the other side of the interpretative

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1 For a different approach to this multi-step process in the *Enneads*, see Dmitri Nikulin, "Memory and Recollection in Plotinus," *Archiv für Geschichte der Philosophie* 96 (2014), pp. 183–20. Nikulin also provides a fruitful overview of the history of the interpretations of 'memory' and 'recollection' in Plato and Aristotle.

2 Philip Merlan, *Mysticism, Monopsychism, Metaconsciousness, Problems of the Soul in the Neoaristotelian and Neoplatonic Tradition* (Den Haag: M. Nijhoff, 1969), p. 58.

3 Plot., *Enn*., V. 9 (5) 5, 28–33.

4 In this respect Jean-Louis Chrétien, *L'inoubliable et l'inespéré* (Paris: Desclée de Brouwer, 1991), pp. 36–37, notes that Plotinus never abandons the issue of Platonic recollection, but rather shifts the emphasis: "La réminiscence du vrai comme actualisation de ce que nous possédons virtuellement et naturellement ne doit pas être mêlée au débat sur la mémoire au sens strict. (…) Plotin abandonne à cet égard la méditation du passé absolu au profit d'une compréhension de la réminiscence proche de celle que Leibniz mettra en œuvre. Le fondement le plus décisif de cet abandon est la thèse propre à Plotin selon laquelle l'âme n'est pas tout entière descendue dans le sensible (…). Le sommet de l'âme n'oublie pas, n'oublie jamais le vrai et n'est même pas exposé à pouvoir 'oublier'."

5 For a recent *status quaestionis*, see Nikulin, "Memory and Recollection in Plotinus", p. 195.

6 Cf. *inter alia*, Henry J. Blumenthal, *Plotinus' Psychology, His Doctrines of the Embodied Soul* (The Hague: M. Nijhoff, 1971), pp. 96–97; Luc Brisson, "La place de la mémoire dans la psychologie plotinienne," *Études Platoniciennes* 3 (2006), pp. 13–27, (p. 16).

7 John McCumber, "Anamnesis as Memory of Intelligibles in Plotinus," *Archiv für Geschichte der Philosophie* 60 (1978), pp. 160–67 (p. 160).

spectrum, Helmig offers a new approach to this question, extending the range of Plotinian recollection so far as to see it in perception itself. Helmig even suggests[8] that Emilsson's[9] interpretation of Plotinus' theory of perception implies that perception requires recollection. Between these interpretative trends, my paper aims to show that recollection, according to Plotinus, plays a specific role in the cognitive activity of the soul that cannot be reduced to the theory of the 'undescended soul'. On the other hand, I do not believe that recollection is at work even at the level of mere perceptive activity. It only appears at the level of specific internal operations of the soul, such as the exercise of *dianoia*. These internal operations are themselves gradual and lead us to discern in the treatises a definition characterised by several layers. The first layer amounts to establish a connection between the imprints received through perception and the traces of the Forms which the soul carries in itself. The second layer consists in the internal ascent of the soul towards the contemplation of the Forms. At each stage of its ascent, the soul fits (*epharmozei*) a certain reality together with a reality of a superior level. At the first level of recollection, the soul fits what it receives from sense-perception together with the traces of the transcendent Forms, which it possesses in a connatural way. At the second level, it fits the traces of Forms together with the Forms themselves.[10]

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8 Christoph Helmig, *Forms and Concepts, concept formation in the Platonic tradition* (Berlin: de Gruyter, 2012), p. 195: "If E. K. Emilsson's assessment of *aisthesis* in Plotinus is right, then 'when we perceive, we activate latent concepts that we already possess.' It is remarkable that, although Emilsson here employs language that is reminiscent of Plato's doctrine of recollection ("activate latent concepts"), the Icelandic scholar never mentions the doctrine of *anamnesis* in his monograph. I want to suggest here that recollection plays an important part in Plotinus' epistemology, albeit in several ways that are not immediately evident."

9 Eyjólfur K. Emilsson, *Plotinus on Sense-Perception* (Cambridge: Cambridge University Press, 1988), p. 137.

10 According to John F. Phillips, "Stoic 'Common Notions' in Plotinus," *Dionysius*, 11 (1987), pp. 33–52, these innate traces in the soul, these images of Forms, can be identified with the *ennoiai*. Here, I shall, on the one hand, be adducing elements in favour of Phillips' interpretation, but I shall, on the other hand, distance myself somewhat from his interpretation of the meaning of the concept of *ennoia*. I do agree with Phillips' assertion that two levels of recollection can be observed in the *Enneads*. However, I do not follow his interpretation of the origin of the notions: according to Phillips, each mention of *ennoia* in the treatises refers to a connatural presence of the intelligible in the soul. As I see it, Plotinus deliberately plays on different registers and significations of *ennoia*. The term *ennoia* can indicate the notion acquired through experience as well as the concept the soul possesses because it derives from intellect. As Pauliina Remes, "Plotinus on Starting Points of Reasoning," *Chôra*, 14 (2016), pp. 29–57, has recently shown, on many occasions, such as in *Enn*., II. 4 (12), 1; VI. 8 (39), 1; I. 8 (51), 3, Plotinus does not hesitate to use the term *ennoia* for the idea one shapes when starting a process of reasoning. That one may empirically shape some concept in order to have a preliminary idea of what one is looking for does not prevent the cognitive process from supposing a collaboration between what comes from the sensible and the innate contents of the soul. So, it seems to me that the *ennoia* simply serving as a starting point in a philosophical enquiry must be clearly distinguished from the *ennoia* linked to recollection. The connection between the two meanings of *ennoia* is, to the best of my knowledge, only established in a clear way in *Enn*., VI. 6 (34), 4. For more on this, see Alain Lernould and Alexandra Michalewski, "Connaître par les notions communes. Quelques usages du concept d'*ennoia* de Plotin à Proclus," in *The Return of Innatism: Epistemology in Post-Hellenistic and Late Antique Philosophy*, ed. by Filippo Forcignano and Alberto Kobec (forthcoming).

Depending on the context, the term ἀνάμνησις can refer to several steps in the general process of the soul's ascent. This fluidity of definition is made all the easier by the general fluidity of the different layers of the soul in Plotinus' psychology. This paper first examines how Plotinus characterises the relationship between ordinary memory and recollection in *Enn.*, IV.3 (27), 25 and then how this definition of recollection can be connected to the one given in *Enn.*, V.3 (49), 2. Finally, it discusses Plotinus' use of the image of writing in the soul, in chapter 4 of the same treatise, to illustrate the process of recollection that the soul undergoes until it reaches the archetypal Forms.

2. Memory and Recollection

Before examining the manner in which recollection is treated in *Enn.*, IV.3 (27), 25, it is worth briefly recalling some indications concerning the general argumentative context of the passage. First of all, chapter 25 is not primarily an investigation of the nature of memory — this is the main topic of *Enn.*, IV. 6 (41)[11] — but rather of the subject which exercises it,[12] and "in what kind of realities it naturally exists."[13] In order to do this, Plotinus starts by reflecting on the kinds of realities that *do not* exercise memory.[14] The question concerning the subject of memory provides the basic structure of the treatise up to *Enn.*, IV.4 (28), which initially formed part of a single large treatise with *Enn.*, IV.3 (27) and IV.5 (29), a super-treatise that Porphyry divided into three parts for editorial reasons. Plotinus argues that the memory of experienced events does not belong to the intellect, nor to the world-soul, whose activity is always focused on the intelligible and thereby above reasoning and calculations and also above the linking operations of memory. This leads him to reject the view that *apatheia* belongs to individual soul, although it is a typical feature of all the incorporeals.[15] Now, in this passage, to say that memory cannot belong to an impassive being, such as the intellect, does not mean that the individual soul is passive in the way that bodies are passive.

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11 As Daniela P. Taormina, "Dalla potenzialità all'attualità. Un'introduzione al problema della memoria in Plotino," in *Plato, Aristotle, or both? Dialogues between Platonism and Aristotelianism in Antiquity*, ed. by Thomas Bénatouïl, Emmanuele Maffi, and Franco Trabattoni (Hildesheim – Zürich – New York: G. Olms, 2011), pp. 139–59, has rightly pointed out, this difference of approach enables us to understand why Plotinus in *Enn.*, IV. 3 (27) seems to admit views, especially a view regarding memory as κατοχή in its capacity to retain images, that he contests with fervour in *Enn.*, IV.6 (41).

12 As Richard King, "Aristotle's *De Memoria* and Plotinus on Memory," in *Les 'Parva Naturalia' d'Aristote, Fortune antique et médiévale*, ed. by Christophe Grellard and Pierre-Marie Morel (Paris: Publications de la Sorbonne, 2010), pp. 101–20, has shown, the two questions are nevertheless connected: determining the subject of memory, namely the individual soul, makes possible the definition of memory as a discursive activity which can be exercised independently of the body to which it is linked.

13 *Enn.*, IV. 3 (27), 25, 7–8.

14 Cf. Riccardo Chiaradonna, "Plotinus on Memory, Recollection and Discursive Thought," in *Greek Memories: Theories and Practices*, ed. by Luca Castagnoli and Paola Ceccarelli (Cambridge: Cambridge University Press, 2019), pp. 310–24 (p. 311).

15 *Enn.*, III. 6 (26), 5.

Rather, as we will see, it implies that the individual soul, even though incorporeal, does not share in the same degree of self-sufficiency as the Forms.

> [**10**] If memory is something acquired (ἐπικτήτου τινὸς), either learnt or experienced, then memory will not be present in those realities which are unaffected (τοῖς ἀπαθέσι) by experience or those which are in the timeless. We must certainly not attribute memory to God, or real being or Intellect; for nothing [external] comes to them and there is no time, [**15**] but eternity, in which real being is, and there is neither before nor after, but it is always as it is, in the same state not admitting of any change. But how can that which stays in an identical and exactly similar state be in a condition of memory, when it neither has nor holds another way of being different from that which it had before, or one thought after another [**20**], so that it may stay in one and remember the other which it had before? But what prevents it from knowing the changes of other things without changing itself, the revolutions of the universe for instance? The reason is that it will think of one thing as before and another as after, following the changes of that which turns, and remembering is something different from thinking. [**25**] One must not say that it remembers its own thoughts: for they did not come, so that it has to hold them fast to prevent them from going away; or in this way it would be afraid that its own essential nature might go away from it. In the same way, then, the soul must not be said to remember, either, in the sense in which we are speaking of remembering, the things which it possesses as part of its nature (συμφύτων), but when it is here below [**30**], it possesses them and does not act by them, particularly when it has just arrived here. But as for its activity, the ancients seem to apply the terms 'memory' and 'recollection' (μνήμην καὶ ἀνάμνησιν)[16] to the souls which bring into act what they possessed. So this is another kind of memory; and therefore time is not involved in memory understood in this sense. But perhaps we are being too easy-going about this [**35**] and not really examining it critically.[17]

In this passage, *apatheia* refers to the self-sufficiency of realities existing beyond time. By contrast, what is liable to receive something is subject to exteriority and temporality and therefore, in a way, is not perfectly self-sufficient. The adjective ἐπίκτητος has a well-defined meaning in the *Enneads*. It denotes something that has an adventitious character, that comes to a substrate from outside. We find it again, for example, in *Enn*., IV.4 (28), where it is used to underscore the opposition between the world-soul which thinks the intelligible immutably and human souls whose thoughts are variable and whose needs are changing.[18] In *Enn*., III.7 (45), 4, Plotinus clearly stresses the opposition between what is ἐπίκτητος and what is σύμφυτος. Eternity, the life of intellect, is immutable in itself, it is already achieved and perfect. Considering that

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16 The value of καὶ has been debated in the secondary literature. With Richard A. H. King, *Aristotle and Plotinus on Memory*, Quellen und Studien zur Philosophie, 94 (Berlin: De Gruyter, 2009), p. 144, n. 615, I take it to be epexegetic.

17 *Enn*., IV.3 (27), 25, 10–35. Transl. Armstrong. Unless otherwise indicated, I always follow the Armstrong translation.

18 *Enn*., IV.4 (28), 17, 9.

eternity is defined as a uni-totality in its fullness, immediately identical to itself and without parts, what is eternal has nothing to acquire.[19] The generated entities, by contrast, only subsist by continuously acquiring new qualities. Here Plotinus states that memory cannot belong to a being totally identical to itself and not admitting of any change. Indeed, the use of memory requires the ability to acquire and retain new elements. In order to properly understand the nature of this capacity to retain events, it is worth recalling the following distinction: As King rightly remarks, memory according to Plotinus is not comparable to a gallery which accumulates pictures. Following Aristotle, Plotinus connects memory to *phantasia*, that is, to the faculty of representation. The soul that remembers events engages in an activity: namely, the reappropriation of its own memories (which, in Plotinus' perspective, are not only images, but also thoughts) through the activation of faculty of representation.[20] Memory is thus an activity of reappropriation of something the soul has acquired previously. It cannot take place in a being that lives in the immutability of eternity, such as the divine intellect. Therefore, intellect does not need to hold (κατέχειν) the Forms fast, preventing them from going away, since it is identical to the intelligible realities, which constitute its very nature. Possessing at once the totality of being, nothing accidental or adventitious could supervene on intellect. The notion of totality is the linchpin of the whole argument. If something could be added to intellect from outside, intellect would not have been invariably perfect and self-sufficient. As it is, intellect has no need at all to acquire or to retain anything external to its own nature. From this argument, a further point is derived: What is immediately present to itself has an unmediated grasp of its object of thought without having to unfold it as a sequence of different moments. Plotinus concludes that memory could not therefore exist at the intellective level.

Plotinus then establishes a distinction between two kinds of memory: ordinary memory (memory in the proper sense), which is always memory of the past and of temporal events, on the one hand, and recollection, on the other. If we consider the case where memory is employed as a means to recover what is connatural to it

19 *Enn.*, III. 7 (45), 4, 19–24.

20 For a comprehensive study of the relation between Plotinus and Aristotle on the issue of memory, see Richard A. H. King, "Aristotle's *De Memoria* and Plotinus on Memory," in: *Les 'Parva Naturalia' d'Aristote, Fortune antique et médiévale*, ed. by Christophe Grellard and Pierre-Marie Morel (Paris: Publications de la Sorbonne, 2010), pp. 101–20. King convincingly makes two important points: Aristotle can hardly be the target of Plotinus' criticisms at *Enn.*, IV.6 (41) of the various theories that make memory an inert reservoir of what is remembered because Aristotle, too, develops a subtle theory of memory as an activity that involves a faculty of representation. However, whereas Aristotle holds that it is the soul-body compound that is the subject of memory, Plotinus makes memory an activity proper to the soul itself. As *Enn.*, IV. 3 (27) indicates, there are two types of *phantasia*, each connected with a different type of memory, namely that of sensible and intelligible things, respectively. In this process, *phantasia* acts as a kind of mirror. On this complex issue, see Riccardo Chiaradonna, "Plotin, la mémoire et la connaissance des intelligibles," *Philosophie Antique*, 9 (2009), pp. 5–53; Danny M. Hutchinson, "Apprehension of Thought in *Ennead* 4.3.30," *The International Journal of the Platonic Tradition*, 5 (2011), pp. 262–82; Nikulin, "Memory and Recollection in Plotinus."

(σύμφυτος),[21] it would be wrong to call this process 'memory'. The term σύμφυτος denotes an intrinsic feature of a given reality and means the exact opposite of ἐπίκτητος.[22] In *Enn.*, IV.7 (2), a treatise devoted to the immortality of the soul, one can find a case exemplifying this point. In ch. 11, Plotinus stresses that, if soul is immortal, that is because life is σύμφυτος to it. Let us briefly summarise this argument, previously analysed at length by Chiaradonna. To define life as σύμφυτος to the soul means that life is neither a quality (not even an essential quality) nor an accident added to the soul, because the soul is not an inert *substratum* but the active principle which communicates life and motion to the derived realities.[23] According to Plotinus, true substances are not substrates upon which external qualities are grafted. So, when the soul recovers something σύμφυτος, it is not remembering in the usual sense. One should rather say that it rediscovers and reapproriates for itself something that constitutes it essentially. Indeed, when it enters the body at birth, the soul possesses intelligible contents that it no longer uses, as it does not direct its attention, that is, its activity, towards them. Plotinus draws a fundamental distinction between possessing or having (*ekhein*) and using, that is, being active (*energein*) in accordance with something (l. 29–32).[24] Plotinus' discussion is rather elliptical here; he does not explain what exactly the soul does in this process of reappropriation, nor how this process is recovered consciously[25] — a topic I will come back to in the final section of this paper.

In turning its attention towards what it possesses connaturally, the soul is experiencing what the ancients called *recollection*: through an act of inner conversion, the soul re-appropriates what it possesses (*ekhein*) innately and yet unconsciously. Plotinus is very careful in the way he defines recollection. He first evokes it as a psychic activity of repossession (31–32), then he indicates that 'the ancients' *seem* to define this activity as "memory and recollection" (32–33).[26] In the *Enneads*, he often refers to the 'ancients' by that name in order to distance himself from them.[27] What has been defined by the ancients may constitute a doxographical starting-point, but it cannot take the place of the philosophical enquiry through which the soul identifies progressively with the object it is seeking. To truly know what eternity is, one must do much more than simply build on previous considerations. One must contemplate

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21 σύμφυτος is that which is constitutive of a certain reality, which is more than being simply 'innate'.

22 Chiaradonna, "Plotinus on Memory," pp. 312–316.

23 *Enn.*, IV.7 (2), 11, 3–9.

24 A similar distinction, between that which we have and that which we make ours through our use and actualisation of it, is developed in *Enn.*, V.3 (49), 3, 23–27.

25 According to McCumber, "Amnamnesis as memory," p. 164, this activation consists in the soul awakening in itself the 'memory of the intelligibles' mentioned in *Enn.*, IV.4 (28), 4.

26 The definition of recollection as a kind of memory, based on *Phaedrus* 249 c 5; 250 a 5, was common in the Platonic tradition (e.g. Alcinous, *Didaskalikos* IV, 155, 34).

27 See, for instance, the beginning of *Enn.*, III.7 (45). I do not agree with King's remark that Plotinus purposefully does not name the ancients in question because their views would be authoritative in themselves. On this point, see Gerard O'Daly, *Platonism Pagan and Christian: Studies in Plotinus and Augustine* (Aldershot: Ashgate, 2001), p. 467.

'eternity and the eternal by the eternal in oneself'.[28] It is the same for recollection: no definition will be acceptable so long as the soul of the one who investigates has not experienced it. Indeed, since recollection lies at the basis of philosophical enquiry, discovering it means discovering what makes this enquiry possible.[29] Then, at l. 35–36, Plotinus stops short of a complete exposition by stating that recollection needs to be studied more carefully at some other time.

To sum up, *Enn*., IV. 3 (27), 25 indicates that the soul that uses memory is not yet aware of itself or of its essential nature because memory establishes a relation between different acquired items, that is, items external to the soul. By contrast, in recollection the soul activates contents that are not derived from the external world. It discovers these as belonging to its own make-up. These issues will be developed more precisely in the chapters 2 and 3 of *Enn*. V.3 (49). These chapters discuss how memory and recollection are two distinct activities of the *dianoia*.

3. Memory, Recollection and Self-knowledge

In this section, I would like to examine how the distinction between ordinary memory and recollection is taken up in *Enn*., V.3 (49), 2–4. As we shall see, Plotinus often presents the process of recollection through images: he speaks of the soul as fitting together (*epharmozein*) different kinds of *typoi* and containing in itself the characters written by intellect, as if the metaphorical register were still the best way to describe this process of recollection that Plato himself speaks of only through *mythos*. I aim to show that it is possible to discern in these chapters the different steps of an encompassing process of recollection, even though Plotinus is quite allusive, using the conditional (φαῖμεν ἄν: l. 14) when evoking the definition of ἀνάμνησις. In *Enn*., IV. 3–4 (27–28), Plotinus stresses the difference between individual embodied soul and the loftier principles (world-soul and intellect). Here, in *Enn*., V.3 (49), Plotinus analyses the *dianoia*, the mode of thinking proper to the soul. In this treatise, devoted to the analysis of self-knowledge, Plotinus first examines the process of sense-perception and goes back gradually to intellection. Sense-perception is an activity of the soul which operates on *data* (*typoi*)[30] stemming from the sensible world. These *data* are dematerialised by passing into the soul. Continuing his ascent through the operations of the soul, Plotinus then discusses the operations of *dianoia*. *Dianoia* requires either external elements or another kind of *typoi* that derive, in this case, from the transcendent Forms. *Dianoia* is located between the exteriority of

28 *Enn*., III.7 (45), 5, 11–12.

29 On the structure of circular arguments in Plotinus' thought, see Chiaradonna, "Plotinus on Memory," p. 324.

30 *Enn*., V. 3 (49) 2, 10. As Pierre-Marie Morel, "La perception, messagère de l'âme, Plotin V.3 (49), 3," in *La connaissance de soi, études sur le traité 49 de Plotin*, ed. by Monique Dixsaut (Paris: Vrin, 2002), pp. 209–27, argues, Plotinus uses the particle οἷον in order to discard even the slightest whiff of materialism attached to the term *typoi*. See also Riccardo Chiaradonna, "Plotinus' Account of the Cognitive Powers of the Soul: Sense Perception and Discursive Thought," *Topoi* 31 (2012), pp. 191–207 (p. 200).

sense-perception and the perfect interiority of the intellect. In fact, it is precisely the activity which allows the shift from the former to the latter through the recollection process. As the following chapters will show, it is at the level of intellection that self-knowledge culminates.[31]

Chapters 2 to 4 of *Enn.*, V.3 (49) form a demonstrative unity. They discuss the articulation of the various psychic operations, from sense-perception up to intellection. Chap. 2 enumerates several possible operations of the reasoning soul (*logizomenon*), each corresponding to one of the several modes of activity of *dianoia*, which are illustrated in chapter 3. *Dianoia*, the ability to link together different *typoi*, can either connect the information provided by sensible exteriority, confining its activity to a sort of empirical circuit, or operate solely in itself by connecting traces that derive from the intelligible realm. It can also relate traces derived from the senses to traces derived from the intelligible: this activity of connecting two kinds of *typoi* is what we might call the "recollections of the soul."

> Τὸ δ' ἐν αὐτῇ λογιζόμενον παρὰ τῶν ἐκ τῆς αἰσθήσεως φαντασμάτων παρακειμένων τὴν ἐπίκρισιν ποιούμενον καὶ συνάγον καὶ διαιροῦν· ἢ καὶ ἐπὶ τῶν ἐκ τοῦ νοῦ ἰόντων [**10**] ἐφορᾷ οἷον τοὺς τύπους, καὶ ἔχει καὶ περὶ τούτους τὴν αὐτὴν δύναμιν. Καὶ σύνεσιν ἔτι προσλαμβάνει ὥσπερ ἐπιγινῶσκον καὶ ἐφαρμόζον τοῖς ἐν αὐτῷ ἐκ παλαιοῦ τύποις τοὺς νέους καὶ ἄρτι ἥκοντας· ὃ δὴ καὶ ἀναμνήσεις φαῖμεν ἂν τῆς ψυχῆς εἶναι.
>
> The reasoning power in soul makes its judgment, derived from the mental images present to it which come from sense-perception, but combining and dividing them; and, as for the things which come to it from intellect, it observes that one might call their imprints, and has the same power also in dealing with these; and it continues to acquire understanding as if by recognising the new and recently arrived impressions and fitting them to those which have long been within it: this process is what we should call the 'recollections' of the soul.[32]

Gerson[33] suggests that lines 11 to 14 are evidence that *ἀνάμνησις* relates the imprints that sense-perception has just received to imprints acquired in a previous incarnation. For several reasons, which may be summarised as follows, his interpretation is hardly sustainable:[34]

(1) Plotinus' previous sentence deals with the way the reasoning power in soul relies on what comes to it from intellect.[35]

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31 For an overview of the argumentative structure of the first chapters of *Enn.* V.3. (49), I refer to Bertrand Ham, *Plotin, Traité 49 (V.3)* (Paris: Cerf, 2000) and Henry J. Blumenthal, "Plotinus, *Ennead* V. 3, 3–4," in *Soul and Intellect*, ed. by Henry J. Blumenthal (Variorum: Aldershot, 1993), pp. 257–80.

32 *Enn.*, V.3 (49), 2, 7–14.

33 Lloyd P. Gerson, *Plotinus* (London: Routledge, 1994), pp. 179–80. For an excellent analysis of the assumptions underlying Gerson's interpretation in the general perspective of the issue of concept formation in Plotinus, see Remes, "Plotinus on Starting Points."

34 For a *status quaestionis*, see Chiaradonna, "Plotinus' Account".

35 Laurent Lavaud, "La *diánoia* médiatrice entre le sensible et l'intelligible," *Études Platoniciennes* 3 (Paris: Les Belles Lettres, 2006), pp. 29–55 (p. 46).

(2) In the *Enneads*, the meaning of ἐφαρμόζω is, to quote Blumenthal, 'drawing its validity from a superior level of reality'.[36] Fitting, in this sense, is not a symmetrical relationship. A simple example may suffice: in *Enn*., VI.7 (38), 29, Plotinus replies to an interlocutor who maintains that intellective life is not a good, based on the idea that it is, allegedly, bereft of pleasure. Before explaining in what being a good consists and denying that intellective life could be such a good, one has to begin by trying to form an idea and to conceive of some notion of 'good'. In other words, one has to start with trying to match what one says about something with the notion one has of it (τῇ ἐννοίᾳ τῇ παρ' αὐτῷ ταῦτα ἐφαρμόττει). The process of harmonising the two implied by the verb ἐφαρμόζω goes in one direction only: one has to adapt what one receives from the sensible to the notions that the soul receives from the intelligible realm.[37]

(3) A final argument may be brought to bear against Gerson's reading. In many other passages, παλαιός (or some derivative term) is employed to denote the character of the first principles such as the intellect or the One.[38]

For all these reasons, it appears that recollection, as defined in *Enn*., V.3 (49), 2, corresponds to the connection made by the reasoning soul between what is received from the senses and intelligible content, i.e. the connection of something derived from the external world to an element proper to the soul. As chapter 3 will show, this mobilisation of the intelligible content of the soul does not necessarily begin with perception, but with certain operations specific to *dianoia*. Emilsson used chapter 3 to support his recent revision of his previous interpretation of the perceptual process. In his latest book, he considerably nuances his earlier reading according to which intelligible content is permanently mobilised in even the most minor of perceptive acts.[39] The issue at stake in these lines, lines that are very difficult to interpret and that have given rise to numerous debates in the secondary literature, is whether perceiving necessarily implies a recognition by the soul of its innate intelligible content. The main difficulty lies in the interpretation of the κρίσις performed at the level of sense-perception and of the ἐπίκρισις of *dianoia* mentioned in the previous chapter.[40] In his book on sense-perception, Emilsson[41] distinguishes two types of judgment: the first, carried out by the sense-perception, pronounces not only on a set of qualities, but can already say 'it is a man.' The second is the ἐπίκρισις by which reason judges this first perceptive judgment and can rectify it. Several corrections to this reading have been proposed, in particular by Lavaud and Remes, who reserve

36 Henry J. Blumenthal, "Plotinus and Proclus on the Criterion of Truth," in *The Criterion of Truth*, ed. by Pamela Huby and Gordon Neal (Liverpool: Liverpool University Press, 1989), pp. 257–80 (p. 259).

37 Pauliina Remes, *Plotinus on Self* (Cambridge: Cambridge University Press, 2007), pp. 146–47.

38 At *Enn*., V.5 (32), 12, 11: τὸ δ' ἀγαθόν, ἅτε πάλαι παρὸν εἰς ἔφεσιν σύμφυτον. Cf. also *Enn*., VI. 4 (22), 14, 14; VI. 7 (38), 31, 34.

39 Eyjólfur K. Emilsson, Plotinus (London: Routledge, 2017), ch. 8, esp. pp. 280–81, where Emilsson draws attention to the case of artefacts, whose notions are empirically formed. On this point, see also Remes, "Plotinus on Starting Points."

40 *Enn*., V.3 (49), 2, 8.

41 Emilsson, *Plotinus on Sense-Perception*, pp. 121–25.

the judicative instance for *dianoia* alone.[42] In 2012, reconsidering the whole issue and in particular the discussion concerning the question of the realism of perception in Plotinus, Chiaradonna put forward the hypothesis that the κρίσις does not correspond exactly to a "*judgment*," but rather to a very low level of knowledge or *thought* (the term "thought" indicating that in sense-perception the soul is always fully active).[43] Perception, then, is not a judgment in the strict sense of the term because judgment as such presupposes the conscious recognition of a datum and the evaluation of its veracity, beginning only with the ἐπίκρισις proper to reasoning. This hypothesis led Emilsson to reconsider the interpretation he had developed in 1988 and to admit that not all κρίσεις of the soul imply a conscious judgment (such a judgment occurs only when the content of the sense-perception passes into the faculty of representation), nor do they always involve the grasping of intelligible Forms. Thus, when Plotinus says that 'sense-perception has seen a man', it is not necessary to suppose that the soul here must go so far as to grasp intelligible Forms: it can, in order to apprehend what it perceives, simply call upon its previous perceptual experiences so as to make a pronouncement. To sum up: it is allowable to say that sense-perception is capable of recognising the existence of a singular entity, e.g. a man and not just a bundle of qualities (colours, shapes, etc.), and that this κρίσις does not necessarily require the soul to go looking for intelligible Forms or traces of Forms that it innately possesses. At this stage of the perceptual process, however, nothing leads us to think that the soul *consciously* recognises that what it perceives is a man. This difference between grasping a thing and forming a conscious representation of the same is reminiscent of the distinction developed by Leibniz in his theory of 'small perceptions' and the distinction he makes between "perception" and "apperception."[44]

Let us now examine more precisely the beginning of chapter 3:

[**1**] Ἡ μὲν γὰρ αἴσθησις εἶδεν ἄνθρωπον καὶ ἔδωκε τὸν τύπον τῇ διανοίᾳ· ἡ δὲ τί φησιν; Ἢ οὔπω οὐδὲν ἐρεῖ, ἀλλ᾽ἔγνω μόνον καὶ ἔστη· εἰ μὴ ἄρα πρὸς ἑαυτὴν διαλογίζοιτο τίς οὗτος, εἰ πρότερον ἐνέτυχε τούτῳ, καὶ λέγοι προς-[**5**]χρωμένη τῇ μνήμῃ, ὅτι Σωκράτης. Εἰ δὲ καὶ ἐξελίττοι τὴν μορφήν, μερίζει ἃ ἡ φαντασία ἔδωκεν· εἰ δέ, εἰ ἀγαθός, λέγοι, ἐξ ὧν μὲν ἔγνω διὰ τῆς αἰσθήσεως εἴρηκεν, ὃ δὲ εἴρηκεν ἐπ᾽ αὐτοῖς, ἤδη παρ᾽ αὐτῆς ἂν ἔχοι κανόνα ἔχουσα τοῦ ἀγαθοῦ παρ᾽ αὐτῇ. Τὸ ἀγαθὸν πῶς ἔχει παρ᾽ αὐτῇ; [**10**] Ἢ ἀγαθοειδής ἐστι, καὶ ἐπερρώσθη δὲ εἰς τὴν αἴσθησιν τοῦ τοιούτου ἐπιλάμποντος αὐτῇ νοῦ·

> [**1**] Well, then, sense-perception has seen a human being and given its impression to discursive reason. What does reason say? It will not say anything yet, but only knows, and stops at that; unless perhaps it asks itself 'Who is

42 Lavaud, "La *diánoia*," pp. 50–55; Remes, *Plotinus on Self*, p. 145, n. 75.

43 Actually, Plotinus never explicitly states that soul needs Forms in order to perceive, unless one gives a strong interpretation to the expression used in *Enn.*, III.6 (26), 2, 35–36 according to which the soul 'approaches what it has' through perception. For a more detailed analysis of this point, see Chiaradonna, "Plotinus' Account," pp. 201–02.

44 See Emilsson, *Plotinus*, pp. 276–77.

> this?' if he has met the person before, and says, using memory to help it [**5**], that it is Socrates. And if it makes the details of his forms explicit, it is taking to pieces what the image-making power gave it; and if it says whether he is good, its remark originates in what it knows through sense-perception, but what it says about this it has already from itself, since it has a norm of the good in itself. [**10**] How does it have the good in itself? Because it is like the good and is strengthened for the perception of this kind of thing by Intellect illuminating it.[45]

Chapter 3 considers the case of conscious perception: sense-perception has seen a man, then transmits a *typos* to the *dianoia*.

Here I would like briefly to indicate a parallel between Plotinus' analyses in this text and those presented in the *Didaskalikos*. It seems to me that in this passage Plotinus, just like Alcinous in chapter IV of the *Handbook*, has in mind the epistemological developments of the *Theaetetus*. In these lines of Plotinus, as in the *Handbook*, we find common references, parallels and differences. Let's take just one example. The description of the functioning of the 'empirical circuit' of the Plotinian *dianoia* is indeed similar to the description of the process of sense-perception given by Alcinous. In both texts, *aisthesis* is compared to a messenger who transmits a *typos* to the soul.[46] Perceptual judgment (for example, seeing Socrates) takes place when the soul connects an actual sensation with a previous memory of the same object.[47] Of course, there remain differences between Plotinus and Alcinous, especially concerning the definition of sense-perception; Alcinous presents sense-perception as a *pathos* of the soul, whereas Plotinus emphasises that only the body is affected in sense-perception while the soul remains always impassible. It would be interesting to explore these differences, but for the moment I would like to come back to the issue of recollection in *Enn.*, V.3: "sense-perception has seen a man." What happens next? The text considers several possible options.

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45 *Enn.*, V.3 (49), 3, 1–11, translation Armstrong slightly modified.

46 I do agree here with Matthias Baltes, *Der Platonismus in der Antike VI 2: Die philosophische Lehre des Platonismus, Text, Übersetzung, Kommentar* (Stuttgart, Bad Cannstatt: Frommann-Holzboog, 2002), p. 125, who holds that the use of the term *typos* by Alcinous is an allusion to the vocabulary of the *Theaetetus* (e.g. ἀποτυποῦσθαι, 191 d6) and not directly to Stoic epistemology; or rather, it is a question of reappropriating an originally Platonic formula that the Stoics had taken up in their corporealist exposition of sense-perception.

47 This definition of the *doxastikos logos* which is at stake in sense-perception gave rise to many discussions in the secondary literature concerning its formation. These discussions echo the discussions of the meaning Plotinus attributes to the *krisis* involved in sense-perception. In fact, Baltes challenged the traditional view, developed notably by David Sedley, "Alcinous' Epistemology," in *Polyhistor: Studies in the History and Historiography of Ancient Philosophy*, presented to Jaap Mansfeld on his Sixtieth Birthday (Leiden: Brill, 1996), pp. 300–12, that the origin of the *doxastikos logos* is merely empirical. Baltes, *Der Platonismus*, pp. 125–26, argued that two kinds of recollection were presupposed by Alcinous: a conscious recollection, which takes place at the level of intellection (corresponding to the activation of the *physikai ennoiai*) and another, unconscious one, involved in sense-perception. "Möglicherweise, ist die unbewusste Anamnesis sogar auf der Stufe der *aisthesis* anzusetzen." For more on this question, see Helmig, pp. 144–54.

(1) The soul recognises that it is indeed a man and goes no further in its investigation, remaining motionless.

(2) The soul recognises that it is a man and then reverts back into itself; that is to say, in a certain way, it awakens its automotricity by a reflexive movement. It questions itself and carries out an internal dialogue. From there, *dianoia* can engage in two distinct activities; the first involves memory and the second, in my opinion, is precisely what chap. 2 called 'recollection'. *Dianoia* (reasoning) becomes active when the soul asks itself certain questions that set in motion the different circuits of reasoning mentioned in the previous chapter. It is important to note that, as King has shown, Plotinus here repeatedly employs the verb λέγειν. The soul that exercises memory is primarily a soul that speaks to itself internally, meaning that it engages in a discursive process: "the characteristic performances of memory are propositional performances."[48] Among the questions that the soul asks itself may be the question "what is this singular individual?". In this case, *dianoia* only sets in motion the empirical circuit. It remembers Socrates by connecting the *typos* currently given by the sense-perception with an earlier *typos* of Socrates existing in *phantasia*. But the soul may ask other questions that go beyond the perceptive judgment, this time questioning the nature of Socrates' soul. In wondering if Socrates is ἀγαθοειδής ("boniform"), the questioning soul starts from sense-perception, but then makes a connection with the rules of judgment it innately possesses. This operation is what I call **level 1** recollection. The adjective ἀγαθοειδής, borrowed from *Rep*. 509 a 3, has a technical sense in the *Enneads*, referring to the idea that each derivative being displays a resemblance to the first principle, the One.[49] Its uses in the treatises illustrate the complexity of the procession-participation process. In fact, to put it briefly, sometimes Plotinus emphasises the fact that the intelligible realities are boniform insofar as they are generated from the One, sometimes that the derivatives become boniform by turning towards it. The ἀγαθοειδής characteristic is first and foremost of the intellect that contemplates its origin, and secondly of the soul, insofar as it is itself the image of intellect. Thus, the soul receives this character through intelligence, insofar as it is itself the image of intelligence. To say that the soul of Socrates is ἀγαθοειδής is to say that it bears a trace of the One and that his soul is turned towards it. With regard to the question concerning the nature of Socrates' soul, the questioning soul can only answer it to the extent that it itself derives from the Good and carries within itself the canon, *criterion*, or norm of what is good (ἤδη παρ' αὐτῆς ἂν ἔχοι κανόνα ἔχουσα).[50] It is indeed the perception of Socrates that

48 King, "Aristotle's *De Memoria*," p. 114.

49 Cf. Laurent Lavaud, "Plotin, *Traité 24 (V, 6)*," in *Plotin, Traités 22–26*, ed. by Luc Brisson and Jean-François Pradeau (Paris: GF-Flammarion, 2004), pp. 109–28 (p. 121); Danielle Montet, "Sur la notion d'*agathoeidès*," *Kairos*, 15 (1999), pp. 131–49.

50 *Enn*., V.3 (49), 3, 10. The term κανών is used in a similar context in *Enn*., I. 6 (1), 3. There Plotinus points out that when the soul sees a beautiful thing, it immediately recognises it through the power that resides in itself. The soul adapts what it sees to the ideal beauty that resides in it and which it uses as a standard for judging. That is why the experience of beauty constitutes a first experience that is ideally suited to

> provides the occasion for this line of questioning, but the soul passes beyond the sense-perception and mobilises internal contents that it becomes aware of because they remind it of its own nature. It responds by drawing from itself the elements that allow it to make a judgment (εἴρηκεν ἐπ᾽ αὐτοῖς, ἤδη παρ᾽ αὐτῆς ἂν ἔχοι κανόνα ἔχουσα τοῦ ἀγαθοῦ παρ᾽ αὐτῇ).

We may conclude that in moving from sense-perception to memory and then to recollection, Plotinus shows a progression of psychic activities. They form a path along which the soul becomes increasingly conscious of its inner nature, of what it innately possesses in itself, and of what ties it to the higher principles.

4. Writing in the Soul

These analyses of the operations of *dianoia*, which connects various incorporeal *typoi*, introduce the image, developed in chapter 4, of writing in the soul. In *Enn*., V.3 (49), 4, Plotinus offers a further detail regarding the nature of these traces present in the soul: they are like letters that the intellect prints in it. Having indicated in the very end of chapter 3 that, if sense-perception is a kind of messenger that transmits the information contained in the sensible, then the intellect is our king,[51] the governing dimension of existence, Plotinus notes that we, too, are kings when we live according to the intellect. There are two ways to conform to the intellect: either by the traces it has left in our souls, or by going beyond that level and trying to make oneself identical to it. It is in his evocation of the first option that Plotinus employs the image of writing in the soul (1–3):

> κατ᾽ ἐκεῖνον δὲ διχῶς, ἢ τοῖς οἷον γράμμασιν ὥσπερ νόμοις ἐν ἡμῖν γραφεῖσιν, ἢ οἷον πληρωθέντες αὐτοῦ.
>
> we can be in accord with it in two ways, either by having something like its writing written in us like laws or as if by being filled by it.

Regarding this image of writing, which Plotinus repeats a few lines down, several things are worth noting.

(1) Plotinus here talks about what is written in the soul without making an explicit comparison between the soul and a writing tablet. The image of writing in the soul does not involve the comparison of the soul to an inert material support.

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stir recollection. For an analysis of the term κανών in this context, a term that stems from Hellenistic debates on the criterion of judgment, cf. Remes, "Plotinus on Starting Points," p. 50, and Emilsson, *Plotinus*, pp. 281–82. For a different reading of this passage, cf. Sara Magrin, "Sensation and Scepticism in Plotinus," *Oxford Studies in Ancient Philosophy*, 39 (2010), pp. 249–97 (pp. 287–88).

51 On the image of intellect as a king, borrowed from Plato, cf. Heinrich Dörrie, "Der König, ein platonisches Schlüsselwort, von Plotin mit neuem Sinn erfüllt," *Revue Internationale de Philosophie* 24 (1970), pp. 217–35; Morel, "La perception," Daniela P. Taormina, "Plotino e Porfirio sul messaggero e il re. Nota sulla conoscenza di sé secondo Plotino, trattato 49.3-44.4.1," in *L'essere del pensiero saggi sulla filosofia di Plotino*, ed. by Daniela P. Taormina (Naples: Bibliopolis, 2008), pp. 247–64.

Rather, it points to the manner in which the soul admits and preserves in itself the traces it receives from intellect, but also to its connection to its principle. It is because it carries innately within itself the traces of that which generates it that it is able to recognise and proclaim its intelligible origin (Εἰ οὖν λέγοι, ὅτι ἀπὸ νοῦ ἐστι),[52] turning towards intellect and thus attaining self-knowledge. The image of writing emphasises the dynamic and living relation the soul has with intellect, to which it remains connected. In fact, Plotinus generally avoids comparing the soul to a wax tablet, regardless of whether he is evoking recollection or memory. As indicated by the end of *Enn*., IV.6 (41), this comparison expresses an improper way in picturing the trace of memories in the soul, because this comparison corporealises the soul and drives us to present the exercise of memory as a form of retention.[53]

The comparison of the soul to a writing tablet has had a variety of uses. I here recall only some of them. It is found in Plato, more particularly in the *Theaetetus* (191 c ff.) and the *Philebus* (39 a-b). In these two passages it occurs in the course of an account of errors in perceptual judgment and of false belief.[54] Aristotle, too, uses the image in various contexts. In *De Memoria* (I, 450 a27-b 11), it serves to illustrate the capacity of memory to retain images coming from outside and that remain as it were imprinted in the soul. In *De Anima* (III, 4, 429b31–430a2), the comparison of the presence of the intelligible forms in the soul to letters engraved in a wax tablet emphasises the receptive aspect of the intellectual dimension of the soul. In the corporealist framework of the Stoa, the image of the writing tablet indicates the corporeal character of the *hegemonikon* onto which concepts originating in sense-perception are imprinted.[55] Since the Hellenistic period, the interpretation of this image has given rise to many controversies, especially concerning the question of where to draw the line between psychic receptivity and the receptivity of a material substratum. Alexander of Aphrodisias, drawing attention to the fact that the intellect is not altered as is a sensible substratum when it receives the abstracted forms, indicates that it is not to a tablet that the intellect must be compared, but rather to the tablet's state of "not being written upon."[56] According to Alexander, comparing the soul to a tablet overly emphasises the image of a substratum: the so-called 'material' intellect is not a substance, but the soul's ability to receive the forms. Yet the interpretation of the impassive receptivity of the soul takes on a new dimension from Plotinus onwards. Refusing to understand the way in which the soul receives the forms according to the Peripatetic model of abstractionism, Plotinus holds on the contrary that the soul receives the intelligible forms from the principle from which it derives, namely the divine intellect.

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52 *Enn*., V. 3 (49), 4, 20.

53 Cf. Taormina, "Dalla potenzialità all'attualità."

54 For a detailed account of these aspects, and their interpretation in the *Enneads*, see Nikulin, "Memory and Recollection in Plotinus."

55 Aëtius, *SVF* II, 83.

56 Alex., *in De Anima*, 84, 25–85, 5.

Let us return to *Enn.*, V.3 (49), 4, 1–3. In the passage's calling to mind the image of writing in the soul, Armstrong[57] discerned a typical example of Plotinus' method of taking inspiration from Peripatic analyses while modifying and reworking the analyses in such a way that they can be made to serve his own purposes. To be sure, in this context Plotinus evokes the image of the soul as a writing tablet, even if only by way of allusion. It is nonetheless clear that the philosophical background is Platonic. Actually, the analyses of the preceding chapters have made clear the manner in which soul retains the *typoi* and puts them to work in perceptual judgment. These chapters deal with issues pertaining to perception and memory, echoing the analyses conducted in the *Theaetetus*, in which Socrates cursorily compares the soul to a writing tablet when he tries to explain the possibility of error in perceptual judgement.[58] The comparison of the soul that retains in its memory the impressions which sense-perception passes on to it to a writing tablet makes it possible to explain perceptual judgment in the following manner: the soul connects the present impression of Theaetetus with the image it has stored of Theodorus and pronounces the false judgment because it thinks it sees Theodorus while actually it sees Theaetetus. Plotinus in *Enn.*, V.3 (49), plays with this image (never explicitly mentioned, but always implicitly present), beginning in chapter 2, by means of his analysis of the operations of judgment and memory as related. Yet he also performs a number of shifts. In chapter 4, he mentions the relation the soul has to the traces of the Forms that it possesses innately in itself. Here the image of the tablet no longer refers to memory, but rather to recollection.[59] As the rest of the chapter shows, the traces in the soul are due to a superior principle performing an act of writing in it. The reality which does the writing, intellect, performs the same act eternally on itself. What the soul receives within itself, it actually takes it from the principle from which the soul derives and from which it constitutes itself. The characters written in its inner self are connatural to it and constitutive of its being. Indeed, the soul is a self-producing image of the intellect: the soul in a certain way gives what it receives from its principle to itself and this contributes to constitute it essentially. In other words, the receptivity of the Plotinian soul in no way implies a form of passivity. But how then to reconcile the image of the intellect writing in the soul

57 Arthur H. Armstrong, "Introductory Note to *Enn.* V. 3 (49)," in *Plotinus*, vol. V, transl. by A. H. Armstrong (Cambridge: Harvard University Press, 1984) p. 69; see also Anne Sheppard, "The soul as a Writing-Tablet, from Plato to Proclus," in *Defining Platonism: Essays in honour of the 75th birthday of John M. Dillon*, ed. by John F. Finamore and Sarah Klitenic Wear (Steubenville, Ohio: Catholic University of America Press, 2017), pp. 218–27 (p. 223).

58 Plato, *Theaetetus*, 191 c ff. On this point, and on the dematerialisation of the image of the wax tablet in *Enn.*, V. 3 (49), see Chiaradonna, "Plotinus' Account," pp. 204–5.

59 For an earlier text in which, in the context of recollection, the soul is likened to a writing tablet, see Plutarch, fragment 215d (Sandbach). Plutarch evokes the image of the tablet sent by the Spartan Demaratus to the Athenians. The tablet contained a secret message warning the Athenians of the imminent Persian invasion. Plutarch uses the image to show that certain bits of knowledge may be present in the soul while remaining hidden. On this point, see Dominic Scott, *Recollection and Experience* (Cambridge: Cambridge University Press, 1995), p. 18.

and the soul's lack of passivity? It seems to me that when Plotinus evokes the role of the intellect that writes in the soul in chapter 4, he is referring to another aspect of writing in the soul, developed especially in the *Phaedrus*,[60] where Socrates speaks of the discourse that science engraves in the soul (276a–b).

In this passage in the *Phaedrus*, after having recalled the history of the invention of writing by Theuth, Socrates speaks of its ambivalent consequences. While allowing us to preserve knowledge, it weakens memory and makes men reliant on what they have written down. It is then that he remarks that paintings and writings have something in common: they remain silent and motionless when questioned. But not all types of writing are destined to remain fixed and mute. There is indeed another type of discourse, that which science itself writes in the soul of the one who learns. This is a living writing linked to the inner activity of the soul. By recalling that everything that is "in the soul" or "linked to the soul (ψυχῇ)" is "alive (ἔμψυχον)," Socrates recalls what he had already developed in the palinode: the soul is a naturally living and self-moving reality that, as a result, communicates life and movement to that for which it is responsible. The soul that thinks the intelligible does so by virtue of its own movement and internalises what it contemplates and understands. A knowing soul is not comparable to a container filled with inert realities. The knowledge of the soul lives in it and through it. It is this dimension to which Plotinus refers here by adapting the image of the *Phaedrus* to his own metaphysical architecture: the soul is not separate from the intelligible intellect and is also capable, through its own movement, of appropriating what the intellect transmits.

(2) Plotinus thus distances himself from any implication of passivity on the soul's part by employing the comparative οἷον; he also distances himself from the possible temporal aspect of this process. When saying that the soul always has the forms in itself, he uses the perfect tense. To show the eternal character of the activity of the intellect which is always already accomplished, the text notes that what the intellect writes, it always writes and has always written. This repetition, which combines the present and the past, marks the identity of eternity and the perfect unity of its activity.

Εἰ οὖν λέγοι, ὅτι ἀπὸ νοῦ ἐστι καὶ δεύτερον μετὰ νοῦν καὶ εἰκὼν νοῦ, ἔχον ἐν ἑαυτῷ τὰ πάντα οἷον γεγραμμένα, ὡς ἐκεῖ ὁ γράφων καὶ ὁ γράψας,

> If, therefore, it says that it is from Intellect and second after Intellect and an image of Intellect having in itself everything as if written in it, as the one who writes and has written is there (…).[61]

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60 For a detailed analysis of this issue in the *Phaedrus*, which combines the question regarding the nature of the soul with recollection, memory, and writing, see Daniela P. Taormina, "Dynamiques de l'écriture et processus cognitif dans le néoplatonisme," in *Contre Platon I. Le platonisme dévoilé*, ed. by Monique Dixsaut (Paris: Vrin, 1993), pp. 215–45.

61 *Enn.*, V.3 (49), 4, 20–22. I follow the text as established by H-S 2. For an overview of the editorial variants of this sentence, cf. *Plotini Opera [edition minor]*, vol. II, ed. by Paul Henry & Hans Rudolf Schwyzer (Oxford: Clarendon Press, 1977), p. 211.

(3) These analyses in *Enn.*, V.3 (49) echo those of *Enn.*, I.2 (19), 4, where Plotinus indicates that these characters, which are engraved in the soul, so to speak, most of the time remain in it as if in the dark, unconsciously. In order to be read, they must be "illuminated." Soul always carries in itself the imprint of the One. In order to become fully virtuous, it needs to turn away from its preoccupation with the sensible. Plotinus calls this process purification. The soul has to become aware of its interior richness which will enable it to make use of what it already possesses without always having been aware of it. Thus it puts its hidden content in the spotlight, thereby illuminating the innate traces of intelligible Forms. The operation by which the soul illuminates and discovers what it possesses in itself is called 'recollection' in *Enn.*, I, 2 (19).

Οὐκ ἄρα εἶχεν αὐτὰ οὐδ'ἀναμιμνήσκεται; Ἢ εἶχεν οὐκ ἐνεργοῦντα, ἀλλὰ ἀποκείμενα ἀφώτιστα· ἵνα δὲ φωτισθῇ καὶ τότε γνῷ αὐτὰ ἐνόντα, δεῖ προσβαλεῖν τῷ φωτίζοντι. Εἶχε δὲ οὐκ αὐτά, ἀλλὰ τύπους· δεῖ οὖν τὸν τύπον τοῖς ἀληθινοῖς, ὧν καὶ οἱ τύποι, ἐφαρμόσαι.

> But did it not have the realities which it sees? Does it not recollect them? It had them, but not active, lying apart and unilluminated; if they are to be illuminated and it is to know that they are present in it, it must thrust towards that which gives it light. It did not have the realities themselves but impressions of them; so it must fit the impressions with the true realities of which they are impressions.[62]

This process can undoubtedly shed light on the somewhat enigmatic formula of *Enn.*, IV.3 (27), 25, 31 (Τὸ δὲ καὶ ἐνεργεῖν ἤδη). To activate what is innate is to illuminate the latent contents of the soul by bringing them into accord with their intelligible models by articulating the traces to the archetypal Forms.[63] This is what I will call **level 2** recollection. In order to read in itself, the soul must first turn away from the sensible and then perform another activity: it must connect these characters unfolding in the soul to the realities from which it derives. Thus, the soul goes beyond the level of discursive writing to ultimately attain a system of non-propositional meaning. Ascending to the intelligible and contemplating the Forms, the soul, as indicated in *Enn.*, V.8 (31) 5–6, deals with another type of writing: hieroglyphic script. In this famous passage, Plotinus opposes the *typos* of the discursive proposition to the hieroglyphic *agalma* which keeps a relation of unmediated signification with the content it expresses. Having indicated that, in the intelligible world, the gods do not contemplate discursively and deal neither with propositions nor with drawn images,[64] but with things themselves, Plotinus notes:

> The wise men of Egypt, I think, also understood this, either by scientific or innate knowledge, and when they wished to signify something wisely, did not use the

62 *Enn.*, I.2 (19), 4, 20–25. Translation Armstrong slightly modified

63 Emilsson and Remes drew my attention to the fact that ethical concepts are privileged examples for describing this process in the Plotinian treatises.

64 *Enn.*, V.8 (31), 5, 22–23 (ἀγάλματα δὲ οὐ γεγραμμένα, ἀλλὰ ὄντα).

> forms of letters (μὴ τύποις γραμμάτων) which follow the order of words and propositions and imitate sounds and the enunciations of philosophical statements, but by drawing images and inscribing in their temples (ἄγαλμα ἐντυπώσαντες ἐν τοῖς ἱεροῖς) one particular image of each particular thing, they manifested the non-discursiveness of the intelligible world.[65]

The transcendent Forms are eternal realities. For Plotinus, eternity is the exact opposite of the perpetual and endless progression of the indefinitely renewed.[66] As indicated in *Enn.*, III.7 (45), such a vision is only an awkward transposition of the flow of time. The intelligible Forms are eternal, that is, they are immediately and fully identical to themselves. When the intellect, which is identical to them, contemplates them, it seizes at once the fully realised completeness of what they are, just as it grasps the whole of the intelligible world. The Forms as well are not like an unfolding series of letters, but rather like hieroglyphs that say all at once. When the soul reaches the contemplation of the archetypal Forms, it passes from discursivity of the intelligible, deployed as the sentences that unfold, as we gradually unroll a papyrus roll, are deployed, to the grasping of a non-discursive intelligibility immediately present to itself. Soul, which is the image and *logos* of intellect,[67] unfolds and develops what is — as it were — enveloped in it (ὕστερον δὲ ἀπ' αὐτῆς ἀθρόας οὔσης εἴδωλον ἐν ἄλλῳ ἐξειλιγμένον ἤδη καὶ λέγον αὐτὸ ἐν διεξόδῳ).[68] The image of the unfolding of the forms in the soul as the unfolding of sentences in a papyrus scroll occurs many times in the *Enneads*. For instance, *Enn.*, I.1 (53), 8, 7 suggests that in the soul the intelligible Forms are — as it were — unrolled (ἐν μὲν ψυχῇ οἷον ἀνειλιγμένα καὶ οἷον κεχωρισμένα). The verb ἀνελίσσω has quite a particular sense: traditionally it is used for the unfolding of a scroll in order to read it. As J. Pépin[69] remarks, in the *Enneads* this verb comes to denote the progressive movement by which what stems from the One unfolds and multiplies itself. Soul successively unfolds the contents that are given all at once in intellect in the unified totality of eternity. The progressive unrolling of the scroll serves as an illustration of this process by which the soul sequentially temporalises the intellective contents which it contains in itself. In *Enn.*, V. 3 (49), 6, Plotinus engages in free etymologising in order to explain that *dianoia*, the distinctive activity of soul, derives from the activity of *noûs* (*dia-noein*). When soul becomes aware of the fact that it possesses in its inner self the traces of intellect, it is capable of fitting them to the superior Forms (τοῖς ἐν αὐτῷ ἴχνεσιν ἐφαρμόττοντι

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65 *Enn.*, V.8 (31), 6, 1–7.

66 For Plotinus' concept of eternity, which he defines as non-duration in accordance with its unextended (ἀδιάστατος) nature, see the magisterial presentation by Denis O'Brien, "Temps et éternité dans la philosophie grecque," in *Mythes et représentations du temps*, ed. by Dorian Tiffeneau (Paris: CNRS, 1985), pp. 59–85. The secondary literature on this issue is abundant; I will refer only to the translation with commentary by Werner Beierwaltes, *Plotin, Über Ewigkeit und Zeit, Enneade III, 7* (Frankfurt: Klostermann, 1967) and to the discussion of this issue in Lenka Karfikova, "Eternity according to Plotinus, *Enn.*, III. 7," *Freiburger Zeitschrift für Philosophie und Theologie*, 58 (2011), pp. 437–52.

67 *Enn.*, V. 1 (10), 6, 40.

68 *Enn.*, V.3. (49), 6, 9–11.

69 Jean Pépin, "Linguistique et théologie dans la tradition platonicienne," *Langages*, 16 (1982), pp. 91–116.

οὕτω τοι γινώσκειν ἑαυτό). At this moment soul truly knows itself.[70] Self-knowledge requires, then, that soul turns away from the exteriority of the sensible: when it turns towards itself, that is, towards its origin, soul rolls up, in the opposite direction, the scroll containing its writing up to the point where its writing coincides with what that has always been writing in it, namely intellect.

5. Conclusion

At the end of our itinerary, we can safely say that, according to Plotinus, the theory of the "undescended soul" does not replace Platonic recollection. Rather, it constitutes its final moment.[71] Indeed, recollection is a psychic process that can be observed at different levels. The process cannot occur at the level of mere sense-perception, but begins with the exercise of *dianoia*, when soul gradually becomes aware of its own nature and begins to make use of its own innate intelligible contents. This initial level, which I have called the first level of recollection, corresponds to the activity by which *dianoia* establishes a relation between an impression coming from outside and a trace of the intelligible. At a later stage, when the soul, which has turned away from the sensible, is capable of turning towards itself and the principles from which it stems, it establishes a relation between the traces of the Forms that it possesses and the transcendent intelligibles. Thus it attains the contemplation of these Forms in themselves, which amounts to what I have called the second level of recollection.

From the perspective of late ancient Neoplatonism, Plotinus can be seen both as an instigator and as the defender of a thesis that was strongly criticised later. The Neoplatonists from Iamblichus onwards all systematically rejected the theory of the undescended soul. Nevertheless, some of Plotinus' key analyses concerning recollection were subsequently taken up, developed, and systematised. When we call Plotinus an instigator of these ideas we mean principally that he provides, in a certain sense, a reading of the *Phaedrus* that emphasises this very point: to forget the Forms is to forget that which enables us, by our contemplation of them, to live a truly human life. As Socrates indicates in the palinode, souls can only associate with a human body to the extent they have contemplated the Forms prior to their embodiment (249 b-c); the individual soul, forgetting the Forms, loses sight of what constitutes the basis of its human identity. While removing from the concept of recollection every connotation of temporality,[72] Plotinus strongly emphasises that a soul that is forgetful of the Forms is, above all, a soul that is forgetful of its own nature, as can

70 *Enn.*, V.3. (49), 6, 20–28.

71 Cristina D'Ancona Costa, "Plotino: memoria di eventi e anamnesi di intelligibili," in *Trace nella mente. Teorie della memoria da Platone e i moderni*, ed. by Maria Michaela Sassi (Pisa: Scola Normale di Pisa, 2007), pp. 67–98 (p. 98), argues that recollection is the epistemological counterpart of the theory of the undescended soul.

72 As Chiaradonna, "Plotin, la mémoire" (p. 22) has rightly pointed out.

be seen very clearly in the initial lines of *Enn.*, V.1 (10).[73] This connection between the awareness of the presence of Forms in the soul and self-knowledge would later be taken up and further developed by the Neoplatonic commentators from the school of Athens.

This can be seen, for example, in Proclus' *Commentary on Plato's First Alcibiades* (*in Alc.*), which defines recollection as the soul's awareness of its own contents and thus as an awareness of its nature as self-mover. The individual embodied human soul is no longer, as in Plotinus, always connected to the intelligible world and anchored to it. Its formation is twofold:[74] it is produced by the demiurge and at the same time self-producing, i.e. it is equally possible to say that it receives its contents from a higher level of reality and that it is the author of its own contents. In the *in Alc.*, Proclus underscores the problematic nature of the comparison of the soul to a blank tablet in order to emphasise the connection between the interiority of the *logoi* discovered during the recollection process and the self-moved nature of the rational soul. Recollection is knowledge that is triggered from outside, by which the self-moved soul (*autokineton*), situated between the bodies moved by others (*heterokineta*), and the immobility of the higher principles (*akinèta*), can nevertheless become aware of its interiority.

In this process, the figure of a Socrates who awakens others takes on a particular significance. Socrates embodies the erotic and providential intellect (*in Alc.*, 43, 7–9):[75] he is the one who inspires within inferiors the love of divine beings and the one who turns them away from what turns them away from themselves. Just as the intellect guides the soul, Socrates leads Alcibiades to knowledge of himself by causing him to stir recollection in himself. Socrates becomes, in this context, the symbol of one who can cause recollection in souls that are fully immersed in the sensible. In the commentaries of Proclus, as in those of his classmate Hermias, the figure of Socrates plays a very important role — a role which he does not have in Plotinus or Porphyry who, holding that the soul is always present in the intelligible world by its intellective dimension, do not pay special attention to the trigger of recollection. Indeed, Socrates becomes an important figure in Neoplatonism from Iamblichus onwards. This is most likely related to the abandonment of the theory of the undescended soul. In the eyes of the post-Iamblichean commentators, Socrates is considered as a sort of agent of the gods, awakening souls that have fallen into becoming and leading them to an awareness of their divine nature.

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73 Chrétien, *L'inoubliable et l'inespéré*, p. 37.

74 For an analysis of this double process, see Jean Trouillard, "Réminiscence et procession de l'âme selon Proclos," *Revue Philosophique de Louvain*, 69 (1971), pp. 177–89.

75 *The Neoplatonic Socrates*, ed. by Danielle Layne & Harold Tarrant (Philadelphia: University of Pennsylvania Press, 2014), have devoted an excellent volume to the figure of Socrates in Neoplatonism. The erotic and anagogic role Proclus and Hermias attribute to Socrates is dealt within the contributions of Geert Roskam (ch. 1), Michael Griffin (ch. 6), J. M. Ambury (ch. 7); I also refer to the analysis of Dominic J. O'Meara, *Pythagoras Revived. Mathematics and Philosophy in Late Antiquity* (Oxford: Clarendon Press, 1989), pp. 152–55.

TOMMASO ALPINA

Retaining, Remembering, Recollecting

*Avicenna's Account of Memory and Its Sources**

1. Introduction

What is memory according to Avicenna? An immediate answer, certainly oversimplified, though not far from the truth, would be: the capacity to store information and to retrieve it later on. Despite grasping two distinctive features of memory, namely the capacity to store and to retrieve information, this answer is unsatisfactory because its vagueness does not do justice to the complexity of Avicenna's account of memory and leaves a number of more fundamental questions unanswered: (1) What is the object of memory? (2) Are storing and retrieving activities of one and the same faculty? (3) What sort of thing has this twofold capacity?

The order in which these issues will be addressed is that of Avicenna. This order is in turn dependent on the Aristotelian claim that the investigation of the correlative objects should come first, and then the activities and the parts of the soul responsible for them should follow.[1] However, since in Avicenna the treatment of memory is intertwined with his theory of internal senses and can be fully understood only

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1 *De an.*, I, 1, 402 b9–16: ἔτι δέ, εἰ μὴ πολλαὶ ψυχαὶ ἀλλὰ μόρια, πότερον δεῖ ζητεῖν πρότερον τὴν ὅλην ψυχὴν ἢ τὰ μόρια. χαλεπὸν δὲ καὶ τούτων διορίσαι ποῖα πέφυκεν ἕτερα ἀλλήλων, καὶ πότερον τὰ μόρια χρὴ ζητεῖν πρότερον ἢ τὰ ἔργα αὐτῶν, οἷον τὸ νοεῖν ἢ τὸν νοῦν, καὶ τὸ αἰσθάνεσθαι ἢ τὸ αἰσθητικόν· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. εἰ δὲ τὰ ἔργα πρότερον, πάλιν ἄν τις ἀπορήσειεν εἰ τὰ ἀντικείμενα πρότερον τούτων ζητητέον, οἷον τὸ αἰσθητὸν τοῦ αἰσθητικοῦ, καὶ τὸ νοητὸν τοῦ νοῦ. See also *De an.*, II, 4, 415 a14–22.

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Memory and Recollection in the Aristotelian Tradition: Essays on the Reception of Aristotle's *De memoria et reminiscentia*, ed. by Véronique Decaix, Christine Thomsen Thörnqvist, Turnhout, 2021 (*Studia Artistarum*, 47), p. 67-92
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against this background, his general account of inward perception will be outlined first.[2] It should also be added that Avicenna excludes any form of intellectual memory. Therefore, his account of memory cannot but be related exclusively to the perception of particulars.[3]

Though the classification and the systematisation of internal senses is common to all Avicennian *summae* (differences will be pointed out in due time), the most comprehensive account of internal senses is provided in the *Kitāb al-Nafs* (*Liber de anima seu Sextus de naturalibus* in Latin, *Book of the Soul* in English, henceforth *Nafs*),[4] which is the sixth section of the second part of the *Kitāb al-Šifāʾ* (*Liber sufficientiae* or *Sufficientia* in Latin, *Book of the Cure* or *the Healing* in English, henceforth *Šifāʾ*). As I have pointed out elsewhere,[5] the account of internal senses represents one of Avicenna's three major expansions of Aristotle's *De anima*, the other two being the treatment of vision (*Nafs*, III, corresponding to just *De anima*, II, 7 and *De sensu et sensibilibus*), and the treatment of the specific nature of the human rational soul (*Nafs*, V, 1–4, which does not precisely correspond to any part of the Aristotelian writing).

Aristotle devotes the first three chapters of the third book of *De anima* to the common sense (III, 1), the relationship between sense and sensible thing and the awareness of perception (III, 2), and both retentive and compositive φαντασία (a faculty that will be included among internal senses later on (III, 3)). He wrote another independent work on memory, namely *De memoria et reminiscentia* (*On Memory and Recollection*), which is part of the so-called *Parva naturalia*, a collection of treatises

2 It is noteworthy that by *idrāk* (*perception*) Avicenna refers not only to sense-perception (both external and internal) but also to intellectual perception, as emerges in *Nafs*, II, 2. A good introduction to Avicenna's theory of internal senses and its background, despite some inaccuracies, can be found in E. Ruth Harvey, *The Inward Wits. Psychological Theory in the Middle Ages and the Renaissance* (London: The Warburg Institute – University of London, 1975) pp. 21–30; 39–46. See also Harry A. Wolfson, "The Internal Senses in Latin, Arabic, and Hebrew Philosophic Texts," *Harvard Theological Review*, 28 (1935), pp. 69–133.

3 On Avicenna's denial of intellectual memory, see *Nafs*, V, 6. For a comment on this chapter, see Tommaso Alpina, *Subject, Definition, Activity: Framing Avicenna's Science of the Soul* (Berlin-Boston: De Gruyter – Scientia Graeco Arabica, 28, 2021) pp. 155–57. See also Tommaso Alpina, "Intellectual Knowledge, Active Intellect and Intellectual Memory in Avicenna's *Kitāb al-Nafs* and Its Aristotelian Background," *Documenti e studi sulla tradizione filosofica medievale*, 25 (2014), pp. 131–83 (pp. 171–73).

4 All quotations from and the translations of Avicenna's *Nafs* are based on *Avicenna's De Anima [Arabic Text], being the Psychological Part of Kitāb al-Shifāʾ*, ed. by Fazlur Rahman (London – New York – Toronto: Oxford University Press, 1959, repr. 1970). The quotation from Avicenna's *Nafs* is usually followed by the reference to the page and the line number of the corresponding passage in the Latin translation in square brackets. See Avicenna, *Liber de anima seu sextus de naturalibus IV–V*, ed. by Simone van Riet with an introduction by Gérard Verbeke (Louvain – Leiden: Peeters – Brill, 1968); Avicenna *Liber de anima seu sextus de naturalibus I–II-III*, ed. by Simone van Riet, with an introduction by Gérard Verbeke (Louvain – Leiden: Peeters – Brill, 1972).

5 See Alpina, *Subject, Definition, Activity*, pp. 9-15, where the table of contents and the correspondences between Avicenna's *Nafs* and Aristotle's *De anima* are provided. See also Alpina, "Intellectual Knowledge," pp. 131–35; 175–77.

supplementing his exposition in the *De anima*.[6] Avicenna, however, includes his account of memory in his philosophical psychology as part of his treatment of internal senses, imaginative prophecy, and veridical dreams (*Nafs*, IV, 1–3).

One might be tempted to consider Avicenna's account of internal senses a result of the combination of *De anima* and *Parva naturalia* in one single work and, ultimately, as a 'differentiation of Aristotle's φαντασία'.[7] However, its background is only partly Aristotelian. This is due to the peculiar reception of *Parva naturalia* in the Arabic world. For, the *Kitāb al-Ḥiss wa-l-maḥsūs* (*Book of Sense Perception and What is Sensed*, the title of the Arabic version of *Parva naturalia*, which is apparently named after the first treatise of Aristotle's original collection) is more an adaptation than a proper translation;[8] excerpts from the Aristotelian text are combined with Neoplatonic and Galenic materials, perhaps according to the adaptor's own concerns. The adaptation, which seems to be related to al-Kindī's circle (ninth century), consists of three treatises (*maqāla*), encompassing the topics of the organs and objects of external senses (I); memory and recollection, sleep, dreams, and divination (II); and length and shortness of life (III).[9]

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6 The treatises making up the *Parva naturalia* are: (i) *De sensu et sensibilibus* (436a1–449b3); (ii) *De memoria et reminiscentia* (449b3–453b11); (iii) *De somno et vigilia* (453b11–458a32); (iv) *De insomniis* (458a33–462b11); (v) *De divinatione per somnum* (462b12–464b18); (vi) *De longitudine et brevitate vitae* (464b19–467b9); (vii.a) *De iuventute et senectute*, and (vii.b) *De vita et morte* (467b10–470b5); (viii) *De respiratione* (470b6–480b30). The *De spiritu* (481a1–486b4), which is sometimes added to them, is spurious. It seems that we owe the label "Parva naturalia" to Giles of Rome (d. 1316). More information on this in Börje Bydén, "Introduction: The Study and Reception of Aristotle's *Parva Naturalia*," in *The 'Parva Naturalia' in Greek, Arabic and Latin Aristotelianism. Supplementing the Science of the Soul*, ed. by Börje Bydén and Filip Radovic, Studies in the History of Philosophy of Mind (Dordrecht: Springer, 2018), pp. 1–50, (n. 12).

7 For the idea that Avicenna's theory of internal senses is a development and a refinement of Aristotle's faculty of imagination (φαντασία), see *Avicenna's Psychology* (*English translation of Book 2, Chapter 6*), ed. by Fazlur Rahman (London: Oxford University Press, 1952), p. 79; 83. Deborah L. Black shares this idea in her "Estimation (*Wahm*) in Avicenna: The Logical and Psychological Dimensions," *Dialogue*, 32 (1993), pp. 219–58, see esp. n. 2.

8 The Arabic text of the adaptation is preserved in one single, acephalous, and rather late manuscript, namely MS Rampur, Raza Library, Ar. 1752, discovered by Hans Daiber (see Hans Daiber, "Salient Trends of the Arabic Aristotle," in *The Ancient Tradition in Christian and Islamic Hellenism. Studies on the Transmission of Greek Philosophy and Sciences dedicated to H. J. Drossaart Lulofs on his ninetieth birthday*, ed. by Gerhard Endress and Remke Kruk (Leiden, 1997), pp. 29–41, (pp. 36–41). R. E. Hansberger is currently preparing the critical edition of the text.

9 For the text and the contents of the Arabic adaptation of Aristotle's *Parva naturalia* see Rotraud E. Hansberger, "Representation of Which Reality? 'Spiritual Forms' and '*ma'ānī*' in the Arabic Adaptation of Aristotle's *Parva naturalia*," in *The 'Parva naturalia' in Greek, Arabic and Latin Aristotelianism. Supplementing the Science of the Soul*, ed. by Börje Bydén and Filip Radovic (Dordrecht: Springer, 2018), pp. 99–121; Rotraud E. Hansberger, "*Kitāb al-Ḥiss wa-l-maḥsūs*: Aristotle's *Parva Naturalia* in Arabic Guise," in *Les 'Parva naturalia' d'Aristote: Fortune antique et médiévale*, ed. by Christophe Grellard and Pierre-Marie Morel (Paris: Publications de la Sorbonne, 2010) pp. 143–62; Rotraud E. Hansberger, "How Aristotle Came to Believe in God-given Dreams: The Arabic Version of *De divinatione per somnum*," in *Dreaming Across Boundaries: The Interpretation of Dreams in Islamic Lands*, ed. by Louise Marlow (Washington – Cambridge, MA: Ilex Foundation and Center for Hellenic Studies, 2008), pp. 50–77; Rotraud E. Hansberger, "The Transmission of Aristotle's *Parva naturalia*

Even though Avicenna had access only to the *Kitāb al-Ḥiss wa-l-maḥsūs* rather than to a faithful translation of the *Parva naturalia* (which is why it does not make much sense to compare his *Nafs* with the Aristotelian *De memoria* directly, or to expect direct influence of Aristotle's treatment of memory on Avicenna's treatment), the general Aristotelian background is still visible and will be pointed out where appropriate.

2. A Survey of the Internal Senses. How Many Memor*ies* Are There?

Before dealing *ex professo* with each internal sense in the fourth treatise, in *Nafs*, I, 5[10] Avicenna provides for the first time in this work a list of internal senses together with a brief description of their activities and a sketchy reference to their bodily location.[11] The internal senses are said to be part of the perceptive faculty together with the five

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in Arabic" (unpublished doctoral thesis, University of Oxford, 2007). It should be noted that both al-Kindī and al-Fārābī refer to the *Parva naturalia* in their list of Aristotle's writings. In particular, in the *Treatise on the Quantity of Aristotle's Books and What is Required for the Attainment of Philosophy* (*Risāla fī kammiyya kutub Arisṭāṭālīs wa-mā yuḥtāǧu ilayhi fī taḥṣīl al-falsafa*, ed. Guidi-Walzer) al-Kindī mentions *De sensu et sensibilibus*, *De somno et vigilia*, and *De longitudine et brevitate vitae*, together with the *De anima*, among the psychological writings (this reflects the contents of the *Kitāb al-Ḥiss wa-l-maḥsūs*). By contrast, in al-Fārābī's *Philosophy of Aristotle* (*Falsafat Arisṭūṭālīs*, ed. Mahdi) the *Parva naturalia* are said to encompass the following topics: (i) the condition of health and disease (*De sanitate et morbo*); (ii) the different ages (*De iuventute et senectute*); (iii) the long and short life (*De longitudine et brevitate vitae*); (iv) life and death (*De vita et morte*); (v) the senses, the sensory organs, and sensible objects (*De sensu et sensibilibus*); (vi) the types of local motion (*De incessu animalium*); (vii) respiration (*De respiratione*); (viii) the status of sleep and waking, dreams and dream-visions (*De somno et vigilia*; *De insomniis*; *De divinatione per somnum*); (ix) memory and recollection (*De memoria et reminiscentia*). Al-Fārābī's list of topics seems to depend on the introductory lines of Aristotle's *De sensu et sensibilibus*, 1, 436 a6-b1. In this connection it is worth recalling that the beginning of the *Kitāb al-Ḥiss wa-l-maḥsūs* is missing.

10 In this chapter a survey of all the psychic faculties (and their activities) that are going to be treated in this writing is offered, see *Nafs*, I, 5, p. 39, 13–14 [p. 79, 3–4]: "Let us now enumerate the faculties of the soul by way of convention (*ʿalà sabīl al-waḍʿ* [*quasi ponendo*]); then we shall engage in the clarification of the state of every faculty (*ṯumma li-naštaǧil bi-bayān ḥāl kull quwwa* [*deinde procedemus ad declarandum unamquamque illarum* (*sc. virium*)])." For the entire translation of this chapter, see Alpina, *Subject, Definition, Activity*, pp. 210–223. A similar survey of psychic faculties can be found in all other Avicennian *summae*. See n. 30 below.

11 For the anatomy of the brain, and the location of imagination, thinking and memory (i.e. the internal, perceptive powers that physicians acknowledge) in the front, central and rear cavity of the brain, respectively, Avicenna relies on Galen. Cf. Galen, *De usu partium*, VIII, 2–3 in Arabic translation. Galen's teaching about the cerebral cavities and faculties situated therein can be also found in Qusṭā ibn Lūqā, *Risāla fī l-farq bayna l-rūḥ wa-l-nafs* (*De differentia spiritus et animae* in Latin), ed. by Gérard Troupeau (Paris: Geuthner, 2011), in particular in the first section where he deals with the psychic pneuma (*rūḥ nafsāniyya*) originating in the brain (see pp. viii, 10-xvi, 11).

(or eight)[12] external senses. The perceptive faculty is one of the two faculties proper to the animal soul, the other being the locomotive faculty.[13]

In the case of the internal senses more than in the case of any other perceptive faculty, Avicenna seems to be concerned with every step and every aspect of the perceptive activity in which they are engaged, beginning with the internal sense closest to the external senses and ending with the internal sense remotest from them. This is, however, the order of exposition. As we shall see, internal perception does not necessarily follow this ordered path. Rather, it might be the case that an internal sense that is more remote from the external world exercises its activity before and on an internal sense that is closer to it.

For what has been just said, the list of internal senses is preceded by a series of preliminary, specific distinctions, on which their differentiation rests:

> As for the perceptive faculties from within, [(a)] some of them are faculties that perceive the forms (*ṣuwar*, sg. *ṣūra* [*forma*]) of sensible things, whereas some [others] perceive the meanings (*maʿānin*, sg. *maʿnan* [*intentio*])[14] of sensible things. [(b)] And among the perceptive [faculties from within] some perceive and act at the same time, whereas some [others] perceive, but do not act. [(c)] And among them some perceive in a primary way, while some perceive in a secondary way (*Nafs*, I, 5, p. 43, 1–5 [p. 85, 88–92]).

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12 This double enumeration refers to the possibility of considering the sense of touch a genus for four species (sub-faculties) disseminated together all over the skin, each of which is capable of perceiving a pair of contraries. These pairs of contraries are: (i) hot and cold; (ii) moist and dry; (iii) hard and soft; (iv) rough and smooth. Cf. *Nafs*, I, 5, pp. 42, 11–43, 1 [pp. 84, 77–85, 87]. For a possible source of this doctrine about the sense of touch, see Philoponus, *In Aristotelis De anima*, 408.2-25 (ed. Hayduck).

13 *Nafs*, I, 5, pp. 39, 18–40, 1 [p. 80, 10–2]: 'The second [division] is the animal soul, which is the first perfection of a natural, organic body in virtue of the fact that it perceives particulars and moves at will'; p. 41, 4 [p. 82, 40–1]: "By means of the first division, the animal soul has two faculties: [(i)] the locomotive [faculty], and [(ii)] the perceptive [faculty]"; p. 41, 16–8 [p. 83, 56–7]: "[(ii)] The perceptive faculty is divided into two parts: among them [(ii.i)] there is a faculty that perceives from outside (*quwwa tudriku min ḫārij* [*alia enim est vis quae apprehendit a foris*), and [(ii.ii)] there is a faculty that perceives from within (*quwwa tudriku min dāḫil* [*alia quae apprehendit ab intus*])." Immediately afterwards (p. 43, 1–2 [p. 85, 88]) the faculties "that perceive from within" are referred to in a slightly different manner, i.e. as *al-quwà l-mudrika min bāṭin*.

14 The correct translation of the word *maʿnan* when it is referring to the proper object of the internal sense has puzzled many scholars. Several translations have been proposed (*intention*, *notion*, *connotational attribute*, *meaning*). I use *meaning* because, though not entirely satisfactory, this translation points to a crucial aspect of *maʿnan*, namely its relational nature: for in this context, *maʿnan* expresses the meaning that a certain form has for a certain perceiver, though existing in the perceived thing, not in the perceiver. For a discussion of the major translations of this term, see Hansberger, "Representation of Which Reality?," p. 103, n. 8; Dag Nikolaus Hasse, *Avicenna's 'De Anima' in the Latin West. The Formation of a Peripatetic Philosophy of the Soul 1160–1300* (London – Turin. The Warburg Institute – Nino Aragno Editore, 2000) pp. 131–32; Deborah L. Black, "Estimation and Imagination: Western Divergences from an Arabic Paradigm," *Topoi*, 19 (2000), pp. 59–75; Black, "Estimation (*Wahm*) in Avicenna." For the notion of *maʿnan* in Averroes' philosophical psychology, see David Wirmer, "Der Begriff der Intention und seine erkenntnistheoretische Funktion in den De-anima-Kommentaren des Averroes," in *Erkenntnis und Wissenschaft. Probleme der Epistemologie in der Philosophie des Mittelalters*, ed. by Matthias Lutz-Bachmann, Alexander Fidora, and Pia Antolic (Berlin: Akademie Verlag, 2004) pp. 35–67.

The first distinction (a) singles out two different objects of the internal senses, namely *ṣūra* and *maʿnan*.[15] *Ṣūra* is the form of sensible things. It is first perceived by the external sense and then brought to the internal sense (I am using the singular to refer to, respectively, external and internal senses as two distinct groups, having their own features, which are shared by the faculties included in them). The characteristic properly distinguishing the *ṣūra* perceived by the internal sense from that perceived by the external sense is that the former is abstracted from matter, i.e. it does not need matter in order to exist in the internal sense, but it is not abstracted from the material attributes, i.e. shape, colour, position, etc.[16] *Maʿnan*, by contrast, is the meaning of sensible things. The soul perceives this meaning without the external sense perceiving it either first or at all. Examples of *maʿnan* are either things that are not sensible at all, such as the sheep's perception of the hostility of the wolf or of the friendliness of its like, or things that are sensible in themselves but are not sensed through the external senses in the moment in which a judgement is made about them, as when by seeing something yellow, the judgement is made that it is honey and, consequently, that it is sweet.[17]

What peculiarly distinguishes *maʿnan* from *ṣūra* is that it is not sensible either in itself or at the moment of its perception. Nonetheless, it is still particular because

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15 See *Nafs*, I, 5, p. 43, 5–15 [p. 86, 93–6].

16 The account of the *ṣūra* perceived by the internal sense, which is provided in *Nafs*, I, 5, has to be supplemented by what Avicenna says in *Nafs*, II, 2, where he deals with the kinds of perception belonging to us and the levels of abstraction of their objects. See *Nafs*, II, 2, pp. 59, 14–60, 10 [pp. 117, 88–118, 5]: "As for imagery and the imaginative faculty, it frees the form extracted (*al-ṣūra al-manzūʿa*) from matter in a stronger way. For it grasps the form from matter in such a way that the form does not need, in order to exist in it, the existence of its matter, because even though matter disappears or ceases [to exist], the form remains firmly existent in imagery. Then, its grasping (*sc.* the grasping of imagery) of it breaks the connection between it and [its] matter in a complete way, even though imagery has not yet abstracted it from the material attributes. Therefore, the sense did not abstract it from matter in a complete way, nor abstracted it from the attributes of matter. Imagery has already abstracted it from matter in a complete way, but it has not abstracted it from the attributes of matter at all, because the form that is in imagery depends on the sensible form and is according to a certain measure, a certain qualification and a certain position. It is by no means possible that a form is imagined in imagery in such a state that all the individuals of that species can share in it. For the imagined man is like one of the men, and there might exist and be imagined men who are not as imagery imagined that man." Though being two distinct faculties, here imagery and the imaginative faculty are treated together because their objects share the same level of abstraction from matter.

17 The perception of this second kind of *maʿnan* requires the memory of a past experience. This is because this kind of *maʿnan* is the result of the combination of the present sensation of yellow and of the form of sweetness, stored in imagery, together with which yellow has been sensed in the past. The judgement concerning that combination experienced in the past is stored in memory. On the ground of the present sensation of yellow, the presence of the form of sweetness in imagery to which estimation has access, and the past experience of that combination, whose related judgement is stored in memory, estimation perceives this kind of *maʿnan*. Certainly, in this perception, and in the related judgement, a mistake might occur. For instance, the seen yellow thing might be bile, not honey, and consequently, in contrast to the *maʿnan* of the estimation, it is bitter, not sweet. For the confusion of bile with honey at the level of estimation, see *Nafs*, IV, 3, pp. 182, 14–183, 1 [p. 35, 97–00]. More on the *maʿnan* and their perception *infra*. Cf. *Nafs*, IV, 1, p. 166, 5–16 [pp. 6, 79–8, 94].

ultimately it depends on and is related to a sensible form stored in imagery, that, though abstracted from matter, still has its material attributes.[18]

This distinction alone is, however, insufficient to account for the differentiation of all internal senses. After the first distinction, a second and a third distinction are introduced. These distinctions explain the various activities that the internal senses perform on their objects (namely forms or meanings) and their relations to their objects. In particular, the second distinction (b) distinguishes senses *perceiving with acting* from senses *perceiving without acting*. The internal faculties belonging to the first group, besides receiving their specific object, be it a *ṣūra* or a *maʿnan*, are capable of acting upon it by combining it with something else or separating it from something else. On the other hand, the internal faculties belonging to the second group only have their object impressed in them without the capacity for acting upon it.[19] The third distinction (c) distinguishes between *first perception* and *second perception*. The former accounts for the faculty's attainment of its object by itself, whereas the latter accounts for the faculty's attainment of its object by means of something else that brings its object to it.[20] As will become clear momentarily, the second and third distinctions cut across the first, more fundamental distinction, namely that based on the objects of internal senses.

From these distinctions the following list of internal senses results.[21] (1) *Common sense* or *phantasia* (*ḥiss muštarak*/*banṭāsiyā* or *fanṭāsiyā*[22] [*sensus communis*/*fantasia*]) is

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18 As for its degree of abstraction from matter, see *Nafs*, II, 2, pp. 60, 10–61, 5 [pp. 118, 6–119, 25]: "Estimation sometimes goes a little beyond this degree of abstraction, since it acquires the meanings that in themselves are not material, even though they happened to be in matter. For shape, colour, position and what is alike are things that cannot be except in bodily matters. As for good and evil, appropriate and [its] contrary, and what is alike, they are things in themselves immaterial, but they sometimes happen to be material. The sign of these things' being immaterial is that, if these things were material in their own right, good and evil, appropriate and [its] contrary would not be intellected, unless they happen to be in a body. But these things (*lit*. that) are sometimes intellected; indeed, they are found [not in matter]. It is, therefore, clear that these things in themselves are immaterial, but they happened to be material. Then, estimation acquires and perceives only what is similar to these things; consequently, estimation perceives immaterial things and grasps them from matter just as it also perceives non-sensible meanings, even though they were material. This extraction (*fa-hāḏā l-nazʿ*) is, therefore, stronger in investigation and nearer to simplicity than the first two extractions (*min al-nazʿayni l-awwalayni*, *sc*. those of external senses and of imagery and the imaginative faculty), except that it (*sc*. the extraction performed by estimation) nevertheless does not abstract this form from the attributes of matter. For it grasps this form as particular, according to a certain matter after another, in relation to it, depending on a sensible form, which is surrounded by the attributes of matter, and with the participation of imagery in it." It is noteworthy that at the end of this passage Avicenna refers twice to the object of the abstraction performed by estimation by using *ṣūra* not *maʿnan*.

19 See *Nafs*, I, 5, p. 43, 15–20 [pp. 86, 7–87, 13].

20 See *Nafs*, I, 5, pp. 43, 20–44, 3 [p. 87, 14–18].

21 See *Nafs*, I, 5, pp. 44, 3–45, 16 [pp. 87, 19–90, 60]. The same, though more detailed, list is contained in *Nafs*, IV, 1, of which an entire, annotated translation is provided in the appendix to the present article. The survey of internal senses I am presenting is the result of the combination of pieces of information contained in both lists.

22 This alternative spelling of the Arabic transliteration of the Greek word φαντασία is found in *Nafs*, I, 5, p. 51, 5, 6 [p. 101, 99[2]], where Avicenna outlines the hierarchy of the psychic faculties.

the faculty located in the front part of the first cavity of the brain that gathers the *ṣuwar* impressed in the five external senses. Avicenna says that "this is in reality what senses" (*wa-hiya bi-l-ḥaqīqa hiya llatī tuḥissu*, p. 165, 8 [*et ipsa est vere quae sentit*, p. 5, 58–9]), since it is the faculty that discriminates[23] between — for example — the colour and the taste inhering in one and the same thing. (2) *Imagery* or the *form-bearing faculty* (*ḫayāl* or *quwwa ḫayāliyya*/*quwwa muṣawwira* [*imaginatio*/*formans*]) is the faculty located in the rear part of the first cavity of the brain, which retains (*taḥfaẓu*, p. 44, 7 [*retinens*, p. 88, 24]) what the common sense receives from the five external senses after the sensible things vanish. Actually, imagery can also retain the (combined or separated) forms of the imaginative faculty (see the following faculty), since they enjoy the same level of abstraction as the forms received in the common sense.[24] (3) The *imaginative* or *cogitative faculty* (*quwwa mutaḫayyila*/*mufakkira* [*vis imaginativa*/*cogitativa*]) is the faculty located in the central cavity of the brain, near the vermiform substance.[25] It combines (or separates) the forms stored in imagery regardless of both the way in which these forms are in the external world and their existence or non-existence. If the animal faculty uses it, this faculty is called imaginative; if, by contrast, the intellect makes use of it, it is called cogitative. (4) *Estimation* or *estimative faculty* (*wahm* or *quwwa wahmiyya* [*aestimatio*/*vis aestimativa*]) is the faculty located at the end of the central cavity of the brain, which perceives the *maʿānin*. In human beings, this faculty makes special judgements (*fī l-insān li–l-wahm aḥkām ḫāṣṣa*, p. 166, 17–8 [*aestimatio autem operatur in homine iudicia propria*, p. 8, 95]) that prevent the soul from granting assent to things neither imagined nor impressed in it. In animals, it is the leading faculty and formulates imaginative judgements connected with what is particular and the sensible form (*wa-hiya l-raʾīsa al-ḥākima fī l-ḥayawān* [...] *ḥukman taḫayyuliyyan maqrūnan bi-l-ǧuzʾiyya wa-bi-l-ṣūra al-ḥissiyya*, p. 167, 1–3 [*iudicans in animali* [...] *iudicium imaginabile coniunctum cum singularitate et forma sensibili*, p. 8, 98–100]). Mistakes can occur in its judgements.[26] (5) The *retentive* and *remembering*/*recollective faculty* (*quwwa ḥāfiẓa*/*ḏākira* or *mutaḏakkira* [*vis memorialis*/*reminiscibilis*]) is the faculty located in the rear cavity of the brain, which retains (*taḥfaẓu*, p. 45, 12 [*retinens*, p. 89, 55]) the *maʿānin* perceived by estimation.[27] It is noteworthy that

23 In *Nafs*, IV, 1 Avicenna seems to ascribe to this faculty a very rudimentary form of judgement (see p. 165, 15–6; the end of § 2 in my translation).

24 See the passage quoted in n. 16, where the objects of imagery and the imaginative faculty are dealt with as a unity since they enjoy the same degree of abstraction.

25 The vermiform substance (*dūda*, *vermis*) is a piece of brain substance, similar to a worm, which acts as a door to close the passageway connecting the front cavity with the rear cavity of the brain, in order to prevent the pneuma from going any further than the middle cavity. As for the fact that the opening of this passageway by raising the vermiform substance up, and the consequent flowing of the pneuma from the front to the rear cavity of the brain, are useful for recollection, see n. 46 below. The vermiform substance and its role are described in Qusṭā ibn Lūqā's *De differentia spiritus et anime* (pp. x, 2-xi, 2, ed. by Troupeau).

26 See n. 17 above.

27 The account of memory can be supplemented by adding that memory is somehow involved in the perception of forms during veridical dreams or prophetic visions and their interpretation (*Nafs*, IV, 2). Moreover, memory is connected with estimation's perception of those *maʿānin* that are sensible but not

Avicenna distinguishes the faculty of memory from the other internal senses by referring to the activity it performs on the object of estimation, i.e. the *maʿnan*, without any explicit reference to the notion of time.[28] By contrast, in his *De memoria*, Aristotle primarily connects the activity of memory (and recollection) with time. However, like Avicenna, he does not assign a specific object to memory: for, just as in Avicenna's account it has the same object as estimation, in the Aristotelian account it has the same object as imagination.[29]

In *Nafs*, I, 5, nothing more is said about memory or its recollective activity. However, more details can be found in *Nafs*, IV, 1. Despite being introductory, this chapter contains more information about memory than any other part of the fourth treatise. Starting from its double name, Avicenna explains that this faculty is called *retentive* "in its preservation of what is in it" (*fa-takūna ḥāfiẓa li-ṣiyānatihā mā fīhā*, p. 167, 11 [*est retinens ob hoc quod id quod est in ea haeret firmiter*, p. 9, 12), whereas it is called *recollective* "in the promptness of its disposition to firmly establish it (*sc.* what is in it), and [then] to conceive [something] through it by retrieving it when it is lost" (*wa-mutaḏakkira li-surʿati stiʿdādihā li-stiṯbātihī wa-l-taṣawwur bihī mustaʿīda iyyāhu iḏā faqada*, p. 167, 11–2 [*et est memorialis propter velocitatem suae aptitudinis ad recordandum per quod formatur cum rememorat post oblivionem*, p. 9, 13–4]).[30]

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sensed at the moment of their perception (*Nafs*, IV, 3). On this latter, see n. 17 above.

28 As we shall see, the notion of time will come into the picture in connection with the description of recollection, which is a process concerning past objects.

29 As for the qualification of the object of memory as something that happened in the past, see *De memoria*, 1, 449 b15: ἡ δὲ μνήμη τοῦ γενομένου; 449 b24–28: ἔστι μὲν οὖν ἡ μνήμη οὔτε αἴσθησις οὔτε ὑπόληψις, ἀλλὰ τούτων τινὸς ἕξις ἢ πάθος, ὅταν γένηται χρόνος. τοῦ δὲ νῦν ἐν τῷ νῦν οὐκ ἔστι μνήμη, καθάπερ εἴρηται [καὶ πρότερον], ἀλλὰ τοῦ μὲν παρόντος αἴσθησις, τοῦ δὲ μέλλοντος ἐλπίς, τοῦ δὲ γενομένου μνήμη· διὸ μετὰ χρόνου πᾶσα μνήμη. As for the fact that memory shares the same object of imagination, see *De memoria*, 1, 450 a22–25: τίνος μὲν οὖν τῶν τῆς ψυχῆς ἐστι μνήμη, φανερόν, ὅτι οὗπερ καὶ ἡ φαντασία· καί ἐστι μνημονευτὰ καθ'αὑτὰ μὲν ὧν ἐστι φαντασία, κατὰ συμβεβηκὸς δὲ ὅσα μὴ ἄνευ φαντασίας.

30 Classifications of internal senses similar to the one provided in *Nafs*, I, 5 can be found in the psychological sections of the other Avicennian *summae*. See (1) *Kitāb al-Maǧmūʿ* or *Ḥikma ʿArūḍiyya* (ed. Ṣāliḥ), pp. 156, 23–157, 20; (2) *ʿUyūn al-ḥikma* (ed. Badawī), p. 78, 8–24; (3) *Kitāb al-Hidāya* (ed. ʿAbduh), pp. 211, 7–215, 6; (4) *Kitāb al-Naǧāt* (ed. Dānišpažūh), pp. 327, 4–330, 5; (5) *Dānešnāme-ye ʿAlāʾī* (ed. Meškāt), pp. 95, 8–99, 5; (6) *al-Mašriqiyyūn* or *Ḥikma Mašriqiyya* (ed. Özcan), pp. 142, 14–143, 13; (7) *Kitāb al-Išārāt wa-l-tanbīhāt* (ed. Forget), pp. 123, 15–125, 15. To these psychological sections, also the *Kitāb al-Qānūn fī l-ṭibb* should be added. See I, i, vi, 5, pp. 128, 17–129, 30 (ed. ʿAbd al-Ḥamīd, 1981 [ff. 23^{r}, a29–23^{v}, a4]). It is noteworthy that in the *Ḥikma ʿArūḍiyya,* Avicenna does not mention the imagery/form-bearing faculty, and assigns its retentive function to the common sense. As for the location of internal senses, he distinguishes between their origin (*manbaʿ*), which is placed in the heart, and the place of their activity (*mawḍiʿ al-fiʿl*), which is the brain. Moreover, he there places memory in the middle of the brain, whereas estimation throughout the brain. From *ʿUyūn al-ḥikma* onwards the treatment of internal senses, their bodily location, and the distinction between perceptive and retentive faculties is similar to the one provided in the *Nafs*, with the following exceptions: in *ʿUyūn al-ḥikma*, the imaginative faculty is the last internal sense to be mentioned; in *Hidāya* and *Dānešnāme-ye ʿAlāʾī*, there is no mention of the location of internal senses; and in *Išārāt*, estimation is said to be located in the entire brain and, notably, in its middle cavity (in general, the location of estimation is not consistent in the various *summae*). On the relationship between epistemology and physiology of internal senses in Avicenna, see Peter E. Pormann, "Medical Practice, Epistemology, and the Physiology of the Inner Senses," in

We shall return later to the recollective activity of memory. Let us now concentrate on the first activity of memory, i.e. retention, on account of which it is called *ḥāfiẓa*. From the survey of internal senses, it emerged that retention (*ḥifẓ*) is not the prerogative of memory alone; imagery (or the form-bearing faculty) is also responsible for it,[31] although, of course, not with respect to the very same kind of object. The reason for this is found in Avicenna's claim that the faculty that receives/perceives something is not capable of retaining that thing:

> Know that reception (*qubūl*, *recipere*) belongs to a faculty different from the faculty through which retention (*ḥifẓ*, *retinere*) occurs. Consider that about water: it has the faculty of receiving engraving, imprinting and, in general, the figure, but it does not have the faculty of retaining it; however, we will add to this a verification for you later on (*sc*. *Nafs*, IV, 1 and 2). (*Nafs*, I, 5, p. 44, 9–11 [p. 88, 25–9]).

Avicenna iterates this claim in *Nafs*, IV, 1, and in *Qānūn*, I, i, vi, 5.[32] Given that he has distinguished between *ṣūra* and *maʿnan* and has ascribed their primary perception to two different faculties, he also has to introduce two different storage faculties for their retention:

> It has become common practice to call 'form' whatever sense perceives and 'meaning' whatever estimation perceives, and each of them has [its proper] depository (*ḫizāna*, *thesaurus*). The depository of what sense perceives is imagery (*al-quwwa al-ḫayāliyya*, *virtus imaginativa*), [(…)]. The depository of

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Interpreting Avicenna. Critical Essays, ed. by Peter Adamson (Cambridge: Cambridge University Press, 2013), pp. 91–108. For a survey of the psychological sections of Avicenna's *summae*, see Alpina, *Subject, Definition, Activity*, pp. 158-183.

31 In *Nafs*, IV, 1 the activity of retention on the part of imagery is referred to as *imsāk* (p. 165, 9 [*retinere*, p. 5, 60]). The same happens also in *Qānūn*, I, i, vi, 5 where, when internal perceptive faculties and their activities are listed, imagery is said to retain (*yumsiku*, p. 128, 20) the forms of sensible things after they are withdrawn from the senses. It is noteworthy that both in *Nafs*, I, 5 and in *Qānūn* Avicenna refers to the *retentive* faculty, namely one of the four natural faculties serving nutrition, by naming it *māsika* (*retentiva*). More on this serving faculty in Tommaso Alpina, "Is Nutrition a Sufficient Condition for Life? Avicenna's Position between Natural Philosophy and Medicine," in *Nutrition and Nutritive Soul in Aristotle and Aristotelianism*, ed. by Roberto Lo Presti and Giouli Korobili (Berlin – Boston: De Gruyter – Topics in Ancient Philosophy, 2020) pp. 221-258.

32 See *Nafs*, IV, 1, p. 165, 11–13 [pp. 5, 64–6, 66]: "Common sense and imagery are as if they are one single faculty, and as if they do not differ in subject (*fī l-mawḍūʿ*, *in subiecto*), but in form (*fī l-ṣūra*, *in forma*), for receiving is not the same as retaining" (*wa-ḏālika annahū laysa an yaqbala huwa an yaḥfaẓa, hoc est quia quod recipit non est id quod retinet*); and *Qānūn*, I, i, vi, 5, p. 128, 20–21 [f. 23^{r}, a48–51]: "Imagery is what retains them after being gathered, and holds them after being withdrawn from the sense. The faculty receiving (*al-quwwa al-qābila*) them is different from the one retaining them (*ġayr al-ḥāfiẓa*). However, the verification of the truth about this [issue] also pertains to the philosopher." Avicenna makes this claim when dealing with imagery as distinct from common sense, but there is no reason not to extend this claim to the case of estimation-memory. Avicenna simply makes this general point the first time the distinction between a receiving/perceiving faculty and a retaining faculty with respect to the same object, i.e. *ṣūra*, is introduced.

> what estimation perceives is the faculty that is called 'retentive' (*al-ḥāfiẓa, virtus custoditiva*), [(…)] (*Nafs*, IV, 1, p. 167, 4–9 [p. 8, 2–9, 9]).[33]

Therefore, although they concern the same object, the perceiving faculty and the corresponding retaining faculty differ in essence because they perform two distinct activities.[34]

To sum up, in Avicenna's account of internal senses memory, inasmuch as it is retentive, appears to be split into two faculties: (1) the memory of forms, or sense-memory (*ḫayāl*), and (2) the memory of meanings (*quwwa ḥāfiẓa*). Avicenna ascribes to the former the same object as that of the common sense, i.e. forms, whereas to the latter he ascribes the same object as that of estimation, i.e. *maʿnan*. Therefore, Avicenna's notion of memory is on the one hand broader than that of Aristotle, whereas on the other hand it is narrower than Aristotle's. It is broader because Avicenna's retentive memory concerns both forms and meanings; it is narrower because the faculty that is properly named memory concerns an object, i.e. meaning, more specific than that of Aristotle's faculty of memory.

3. A 'Philosophical Investigation': Are Storing and Retrieving Activities of One and the Same Faculty?

As has emerged, memory, like imagery, is a storage faculty: it retains *maʿānin* without acting upon them. This makes memory (and imagery) an internal sense *perceiving without acting*, according to the aforementioned second distinction. What is more, memory seems also not to perceive by itself its proper object, but to attain it by means of something else, i.e. estimation, that brings its proper object to it. Therefore, memory also falls under the category of the internal senses responsible for *second perception* (a derivative form of perception), according to the aforementioned third distinction. Nonetheless, memory is also said to be recollective. This supposedly implies that it is the faculty *actively* and *primarily* engaged in retrieving what has been forgotten. Thus, one might wonder whether, according to Avicenna, retaining and recollecting are activities of one and same faculty and, if so, how attributing these two activities to one single faculty can be reconciled with the aforementioned distinctions.
It is noteworthy that in Aristotle's *De memoria*, it is very clear that memory/having memory (μνήμη/μνημονεύειν) and recollection (ἀνάμνησις) are two distinct activities,

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33 On the fact that imagery and memory perform the same storing function, see: *Nafs*, I, 5, p. 45, 13–16 [pp. 89, 56–90, 60]: "The relation of the retentive faculty to the estimative faculty is like the relation of the faculty that is called imagery to the [common] sense; and the relation of that faculty (*sc.* the retentive faculty) to meanings is like the relation of this faculty (*sc.* imagery) to the sensible forms." It should be kept in mind that imagery also provides storage of the (combined or separated) forms of the imaginative faculty.

34 See the first text quoted in n. 32 above. On the retentive function shared by imagery and memory in Avicenna, see Carla Di Martino, *Ratio Particularis. Doctrines des Sens Internes d'Avicenne à Thomas d'Aquin* (Paris: Vrin, 2008), pp. 126–31.

but less clear whether one faculty performs both activities.[35] In particular, in *De memoria*, 1 Aristotle attributes sensitive and intellectual memory to the πρῶτον αἰσθητικόν, i.e. the primary sensitive part of the soul,[36] and maintains that it belongs to the same part of the soul to which imagination belongs, i.e. to the animal, sensitive soul.[37] Unfortunately, in the *Kitāb al-Ḥiss wa-l-maḥsūs,* these passages are mistranslated and a parallel with the Aristotelian original text is difficult to establish.[38] As for recollection, Aristotle does not explicitly say to which part of the soul it belongs. In *De memoria*, 2 he just claims that recollection is like a sort of deduction and search[39] and that it belongs to those animals that also have the deliberative part of the soul.[40] The *Kitāb al-Ḥiss wa-l-maḥsūs* is of no help also in this case: the passages in question have not been translated (or adapted) into Arabic.

In *Qānūn*, I, i, vi, 5, Avicenna explicitly raises the question of whether memory and recollection belong to the same psychic faculty or not. After presenting 'the retentive or recollective faculty', its storage activity, and its bodily location, he says:

> Here is the place for a philosophical investigation (*mawḍiʿ naẓar falsafī* [*locus considerationis physicae*[41]]) on whether the faculty that retains (*al-quwwa al-ḥāfiẓa*), recollects (*wa-l-mutaḏakkira*), and retrieves (*wa-l-mustarǧiʿa* [*virtus quae reducit*]) what vanished from the retention among the things stored [as a result of the activity performed] by estimation is one single faculty or two faculties (*quwwa*

35 In *De memoria*, 1, 451 a20–1 and 2, 453 a4–5 Aristotle clearly maintains that memory/having memory and recollection are two different activities. Their distinction seems to be maintained also in the *Kitāb al-Ḥiss wa-l-maḥsūs*. See Hansberger, "The Transmission of Aristotle's *Parva naturalia* in Arabic," p. 119.

36 *De memoria*, 1, 450 a12–14: ἡ δὲ μνήμη, καὶ ἡ τῶν νοητῶν, οὐκ ἄνευ φαντάσματός ἐστιν, <καὶ τὸ φάντασμα τῆς κοινῆς αἰσθήσεως πάθος ἐστίν>· ὥστε τοῦ νοῦ μὲν κατὰ συμβεβηκὸς ἂν εἴη, καθ'αὑτὸ δὲ τοῦ πρώτου αἰσθητικοῦ. This claim also explains why animals have memory.

37 *De memoria*, 1, 450 a22–25. For the text, see the second passage quoted in n. 29 above.

38 For the Arabic translation/adaptation of the Aristotelian text I rely on Hansberger, "The Transmission of Aristotle's *Parva naturalia* in Arabic," pp. 53–59.

39 *De memoria*, 2, 453 a9–12: αἴτιον δ'ὅτι τὸ ἀναμιμνήσκεσθαί ἐστιν οἷον συλλογισμός τις. ὅτι γὰρ πρότερον εἶδεν ἢ ἤκουσεν ἤ τι τοιοῦτον ἔπαθε, συλλογίζεται ὁ ἀναμιμνησκόμενος, καὶ ἔστιν οἷον ζήτησίς τις. For this reason, Bloch argues that for Aristotle "the interesting question about recollection is not *what* it is, but *how* we do it", see David Bloch, *Aristotle on Memory and Recollection. Text, Translation, Interpretation, and Reception in Western Scholasticism*, Philosophica Antica 110 (Leiden – Boston: Brill, 2007), p. 74. A further confirmation of the fact that in *De memoria* Aristotle does not tackle the issue concerning the part of the soul to which recollection belongs is provided by the summary of the contents of *De memoria* at the end of the treatise; see 453 b8–11: περὶ μὲν οὖν μνήμης καὶ τοῦ μνημονεύειν, τίς ἡ φύσις αὐτῶν καὶ τίνι τῶν τῆς ψυχῆς μνημονεύει τὰ ζῷα, *καὶ περὶ τοῦ ἀναμιμνήσκεσθαι, τί ἐστι καὶ πῶς γίγνεται καὶ διὰ τίνας αἰτίας*, εἴρηται. (Emphasis mine).

40 *De memoria*, 2, 453 a12–14: τοῦτο δ'οἷς καὶ τὸ βουλευτικὸν ὑπάρχει, φύσει μόνοις συμβέβηκεν· καὶ γὰρ τὸ βουλεύεσθαι συλλογισμός τίς ἐστιν. On the basis of *De memoria*, 2, 453 a4–14, David Bloch connects memory with the sensitive soul and recollection with the intellective soul, see Bloch, *Aristotle on Memory and Recollection*, p. 75.

41 It is noteworthy that here Gerard of Cremona, the translator of the *Qānūn* into Latin, renders the Arabic *falsafī* (*philosophical*) with *physicae* (*natural*, i.e. *concerning natural science*). Perhaps here Gerard of Cremona understands *falsafī* as a specific reference to natural philosophy. However, judgements on the Latin rendering of the Arabic text should be carefully formulated because the Latin translation of Avicenna's *Qānūn* still awaits a critical edition.

> *wāḥida am quwwatāni*). However, this is not among the things that is incumbent upon the physician [to investigate] (p. 129, 24–6 [f. 23^{r}, b52–6]).

Though immediately dismissed as philosophical (it involves notions like unity and multiplicity and, in addition, issues that the physician has to acknowledge but not to investigate)[42] and, consequently, not relevant to the physician, this question points at a somewhat troublesome issue that needs to be addressed. The answer to this question has to be looked for in *Nafs*, IV, 1. For, though being an introductory chapter, it provides a more detailed account of internal senses than *Nafs*, I, 5 and, most importantly, contains the only information about recollection in the entire *Nafs* (as we shall see, *Nafs*, IV, 3, which is supposed to deal with memory in general, in fact deals only with corollaries to recollection).

As we have seen, Avicenna calls the faculty of memory recollective because of its prompt disposition to make firm and stable the *maʿānin* that are in it and to conceive something through them by retrieving them when they are lost. The aims of the prompt disposition of the recollective faculty can be spelt out as (1) making present some *maʿnan* by bringing it out of the totality of *maʿānin* amassed in memory and (2) conceiving (*taṣawwur*) something else — always particular — through the *maʿnan* that has been made present. These two consecutive activities (1–2) are the result of the activity of retrieval of something that was lost. This activity of retrieval seems to be the core of recollection. Aristotle has a very similar account of recollection. He argues that recollection is an effortful process and involves actively seeking (ζήτησις) for the object to which one has lost immediate access, possibly through a long chain of associations.[43]

That being said, what triggers the process of recollection and what actually recollects still remain to be ascertained. In this connection, the last part of *Nafs*, IV, 1 seems to answer both these questions. There, Avicenna provides a general account of the process of recollection:

> That (*sc.* recollection) happens when [(a)] estimation turns towards its imaginative faculty, and then [(b)] begins to review one by one the forms existing in imagery so that it is as if it sees the things of which these are forms. Then, when [(c)] the

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42 As for philosophical questions raised in the *Qānūn*, whose answer is deferred to (natural) philosophy, see Tommaso Alpina, "Al-Ǧūzǧānī's Insertion of *On Cardiac Remedies* in Avicenna's *Book of the Soul*: the Latin Translation as a Clue to his Editorial Activity on *the Book of the Cure*?," *Documenti e studi sulla tradizione filosofica medievale*, 28 (2017), pp. 365–400 (pp. 377–78).

43 *De memoria*, 2, 452 a7–13: πολλάκις δ'ἤδη μὲν ἀδυνατεῖ ἀναμνησθῆναι, ζητῶν δὲ δύναται καὶ εὑρίσκει. τοῦτο δὲ γίγνεται κινοῦντι πολλά, ἕως ἂν τοιαύτην κινήσῃ κίνησιν ἧ ἀκολουθήσει τὸ πρᾶγμα. τὸ γὰρ μεμνῆσθαί ἐστι τὸ ἐνεῖναι δύναμιν τὴν κινοῦσαν· τοῦτο δέ, ὥστ'ἐξ αὑτοῦ καὶ ὧν ἔχει κινήσεων κινηθῆναι, ὥσπερ εἴρηται. δεῖ δὲ λαβέσθαι ἀρχῆς· διὸ ἀπὸ τόπων δοκοῦσιν ἀναμιμνήσκεσθαι ἐνίοτε. For an analysis of Aristotle's account of recollection, see Peter Adamson, "Memory from Plato to Damascius," *Proceedings of the Aristotelian Society Supplementary Volume*, 93 (2019), pp. 161–184; Richard A. H. King, *Aristotle and Plotinus on Memory* (Berlin: De Gruyter, 2009), esp. pp. 90–103; and Bloch, *Aristotle on Memory and Recollection*, pp. 72–77. In the *Kitāb al-Ḥiss wa-l-maḥsūs* we can find a similar account of recollection. There it is referred to as a search (*ṭalab*) and a progressive movement starting from a thing similar, opposite or near to the one that is looked for. See Hansberger, "The Transmission of Aristotle's *Parva naturalia* in Arabic," pp. 103–17.

> form occurs to that (*sc.* to estimation) with which it perceived the meaning that ceased [existing in it], [(d)] the meaning appears to it (*sc.* to estimation) then just as it appeared from outside, and [(e)] the retentive faculty (*al-quwwa al-ḥāfiẓa*) firmly establishes it in itself just as it did then. [(f)] There is then remembering (*ḏikr* [*memoria*]) (*Nafs*, IV, 1, p. 167, 12–17 [pp. 9, 14–10, 20]).

Estimation seems to trigger the process of recollection by turning towards the imaginative faculty and reviewing the sensible forms of imagery as if it sees the things of which these are forms (a, b).[44] Then, when during its activity of reviewing, estimation comes across the form with which the sought-after meaning, now forgotten, has been previously perceived (c), the meaning appears in estimation in the very same way in which it did when it was perceived for the first time from outside (d). Then, the retentive faculty makes this meaning stable again in itself as it did in the past (e). As a result, remembering occurs (f).

According to this account, the activity of "firmly establishing the meaning" (*istaṯbatathu*, p. 167, 16 [*stabiliet eam* (*sc. intentionem*), p. 9, 19]), which is proper to memory (see also § 1) and results in recollection, is always subordinated to the activity of reviewing the forms of imagery on the part of estimation. This activity somehow recreates the conditions of the first acquisition of the meaning from imaginative form(s). It is this activity of estimation that makes the sought-after meaning appear to estimation. Only then does the retentive faculty promptly make it present and stable in itself by making it emerge from the contents gathered in it, as a consequence of the relation of what is sought after to what is preserved in retention. The key role of estimation in recollection can be explained by considering the fact that the *maʿnan*, being either the immediate object of recollection or that by means of which something else (a *ṣūra*) is recollected, is primarily the object of estimation.

Besides the recollecting process from the form to the meaning, Avicenna also mentions the reverse process, namely that from the meaning to the form. Unlike the first process, in which what is sought after is related to the contents of the retentive faculty, i.e. it is a *maʿnan* retained in memory that has to be made present again, in the second process, what is sought after is related to the contents of imagery, i.e. it is a *ṣūra* retained in imagery from which a *maʿnan* was perceived. In this case, what has been forgotten is not the meaning but the imaginative form to which the meaning is related. Avicenna envisages two possibilities for retrieving the form and reestablishing its relation to the meaning in memory: either (a) a backwards process from the meaning to the form from which the meaning was perceived, always within the boundaries of internal perception, or (b) a new perceptive process starting from the external sense in the event that the form cannot be retrieved through (a):

> So, its (*sc.* of what is in imagery) returning [back] is either [(i)] in the way of the return to these meanings that are in the retentive faculty (*fī l-ḥifẓ*) so that

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44 On the fact that estimation makes use of imagery/the form-bearing faculty in order to recollect, see *Nafs*, IV, 3, p. 185, 8–9 [p. 40, 60]: "As for the form-bearing faculty, estimation needs it for memory and recollection."

> the meaning compels the appearance of the form, then the relation to what is in imagery returns back [to the retentive faculty] a second time, or [(ii)] by reverting to the sense (*Nafs*, IV, 1, p. 168, 2–4 [p. 10, 20–6]).[45]

In both processes the faculty that triggers the process of recollection seems to be estimation. In this connection, it is noteworthy that in his account of recollection, Avicenna never mentions the recollective faculty but refers only to memory as the retentive faculty. Therefore, the recollective faculty is the faculty that ultimately recollects in the sense that it makes present to itself what it has previously stored in itself but afterwards forgotten (it does not acquire a new content, namely a content that it has never perceived before). However, the process resulting in recollection is ruled by estimation, which acts on the contents of either imagery (through the mediation of imagination) or memory. It might be for this reason that Avicenna also makes the general point that ultimately estimation seems to be in charge of internal perception as a whole (here estimation's role as a judge is worth recalling).[46]

Next, though estimation in itself is the faculty that makes judgements, through its movements and its activities it is also said to be imaginative, cogitative, and recollective: it is imaginative and cogitative because it acts upon forms and meanings, whereas it is recollective because of that to which its activity leads.[47] The fact that estimation is also recollective (*mutaḏakkira*, p. 169, 2, and *ḏākira*, p. 169, 6), whereas memory (*ḥāfiẓa*, p. 169, 2) is its depository and is characterised by a disposition that makes it recollect, though derivatively, is not surprising. As has emerged, Avicenna has already distinguished between those internal senses which receive and act upon what they receive, and those which merely receive, with no possibility of performing any kind of activity upon what is received. Memory belongs to the latter group; technically it is a depository, a storage faculty. Recollection, by contrast, requires an active principle as a necessary condition which memory by itself cannot satisfy.

4. What Sort of Thing Has Memory? And What Sort of Thing Also Recollects?

The active principle in recollection seems to be estimation's inspection of the contents of imagery through the mediation of the imaginative faculty. However, is this a sufficient condition for recollection to take place? In other words, is it sufficient to have estimation (which has — constitutively, I would say — access to imagery and memory) to be able to recollect? The answer to this question does not lack

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45 For Avicenna's examples of processes (a) and (b), see § 5.1.2 in the translation of *Nafs*, IV, 1 provided in the appendix to the present article.

46 On the fact that the forms retained in imagery penetrate the rear cavity of the brain, i.e. the seat of memory, upon the decision of estimation, which opens at will the vermiform substance, and on the physiology of this transfer, which occurs through the mediation of the pneuma of the imaginative/cogitative faculty, see *Nafs*, III, 8, pp. 153, 9–154, 11 [pp. 270, 77–272, 2].

47 See *Nafs*, IV, 1, pp. 168, 15–169, 2 [p. 11, 44–8].

consequences. For, if estimation is a sufficient condition for recollection, all animals will be able to recollect, since all animals are endowed with estimation (in animals, estimation is said to be the leading faculty).[48]

However, at the end of *Nafs*, IV, 1 Avicenna restricts the roster of those having the capacity for recollection to human beings by saying: "It seems that recollection, which occurs deliberately (*al-wāqiʿ bi-l-qaṣd* [*quae provenit ex intentione*]), is a notion belonging to the human being alone" (p. 169, 3 [p. 11, 49–50]). The fact that recollection *occurs deliberately*, i.e. following a rational deliberation, actually restricts recollection to human beings: they are the only living beings endowed with a rational faculty responsible for deliberation in addition to estimation.

Avicenna explicitly tackles this issue in *Nafs*, IV, 3.[49] At the beginning of the discourse on memory and recollection, he says:

> Remembering (*al-ḏikr* [*memoria*]) is in all other animals. By contrast, recollection (*al-taḏakkur* [*recordatio*]), namely the device for the retrieval of what is effaced, according to what I think, is only in the human being. For the inference of the fact that there was something and then it vanished, belongs only to a rational faculty; and if it belongs to a non-rational [faculty], it might belong to estimation adorned with rationality. Then, all other animals, if they remember, remember (*fa-sāʾir al-ḥayawānāt in ḏakarat ḏakarat* [*reliqua enim animalia si memorant, memorant tantum*]), whereas if they do not remember, they do not desire to remember, nor would that occur to them. Rather, this desire and quest belong to the human being (*Nafs*, IV, 3, p. 185, 9–15 [pp. 40, 61–41, 68]).

Recollecting is based on the inference (*istidlāl* [*cognoscere*]) that something was there but then vanished. This inference can only be made by a rational faculty, i.e. the theoretical intellect, or by estimation 'guided' by that rational faculty. In addition, the inference that something, previously present, vanished is accompanied by the desire (*šawq* [*desiderium*]) to retrieve it, and by a consequent quest (*ṭalab* [*appetitus*]). Here, Avicenna spells out what he just hinted at by *al-wāqiʿ bi-l-qaṣd* at the end of *Nafs*, IV, 1: in order for recollection to occur, the two faculties of the rational soul have to be present, namely the practical intellect, which is responsible for deliberation, and the theoretical intellect, which provides the ground for deliberation through the aforementioned inference.[50] Once all these conditions are satisfied, i.e. the presence of estimation together with that of the faculties of the human rational soul, recollection occurs.

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48 See above but also *Nafs*, IV, 3, p. 182, 14 [p. 35, 96].

49 Though bearing the title "On the activities of the recollective and the estimative faculty, and on the fact that the activities of all these faculties are by means of bodily organs," this chapter does not deal with the activity of recollection, but rather with those who have recollection, their temperaments, and the analogies and the differences between recollection and learning.

50 See *Nafs*, V, 1, p. 207, 12–13 [p. 78, 32–34], where the practical faculty is said to depend on the theoretical faculty: "This faculty (*sc.* the practical intellect) takes support from the faculty that concerns universals (*wa-takūnu hāḏihi l-quwwa istimdāduhā min al-quwwa allatī ʿalà l-kulliyyāt*): from here it grasps the major premises in what it deliberates upon, and it infers concerning particular [matters]."

For this very reason animals do not recollect.[51] What can be labelled as 'animal recollection' is a sort of *experiential memory*, namely the result of an association of a form presently perceived with a past experience.[52] The general claim is that when an animal perceives something pleasant or something painful (or something useful or something harmful) together with a sensible *ṣūra* perceived from outside, that *ṣūra* will be stored in imagery, whereas its relation to the *maʿnan* (of, for instance, painful*ness*) and the judgement about this relation are stored in memory.[53] This is the standard way in which the retention of a perceptive experience occurs. Then, when the animal perceives the same sensible form again from outside, that form, which is in imagery, becomes present in estimation through the mediation of the imaginative faculty together with the meaning associated with it, which was stored in memory.[54] Technically, this is not recollection (*taḏakkur*) because animals lack the deliberation to recollect. Rather, it is something close to experience.[55] It is regaining awareness of the retained thing, i.e. remembering (*ḏikr*),[56] without deliberately recollecting it. However, this does not always happen: animals might get the same mental content but without grasping it as something previously experienced. For this reason, in *Nafs*, IV, 3 Avicenna includes this activity among those pertaining to estimation without reason.[57]

Next, Avicenna introduces two corollaries to his treatment of recollection, namely (1) similarities and differences between recollecting and learning[58] and (2) the taxonomy of human beings according to their lesser or greater capacity for retention, recollection, learning, and understanding.[59] Similar issues can be found in Aristotle's *De memoria* and in the *Kitāb al-Ḥiss wa-l-maḥsūs*.[60]

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51 See *Kitāb al-Ḥayawān*, I, 1, p. 7, 7–8: "Among animals there are those that are strong in retention (*al-ḥifẓ*), like camels and donkeys. By contrast, recollection of what has been forgotten (*wa-amma taḏakkur al-mansiyyi*) belongs to the human being alone." See also Aristotle, *Historia animalium*, I, 1, 488 b23–26: Βουλευτικὸν δὲ μόνον ἄνθρωπός ἐστι τῶν ζῴων. Καὶ μνήμης μὲν καὶ διδαχῆς πολλὰ κοινωνεῖ, ἀναμιμνήσκεσθαι δ'οὐδὲν ἄλλο δύναται πλὴν ἄνθρωπος. Cf. also the passage quoted in n. 39 above.

52 On this aspect, see Ahmed Alwishah, "Avicenna on animal self-awareness, cognition, and identity," *Arabic Sciences and Philosophy*, 26 (2016), pp. 73–96 (p. 80).

53 On the fact that the relation between *ṣūra* and *maʿnan* is stored in memory, see *Nafs*, IV, 3, p. 184, 16–7 [p. 39, 43–5].

54 On the perception of this kind of *maʿnan* through estimation, see n. 17 above.

55 See *Nafs*, IV, 3, pp. 184, 13–185, 6 [p. 39, 39–52], where Avicenna speaks of dogs' fear for the mud and the wooden stick. This consideration should be compared with IV, 1, p. 164, 1–2.

56 Here Avicenna distinguishes *ḏikr*, as remembering without deliberation, from *taḏakkur*, as deliberately recollecting. However, the process of *taḏakkur* (deliberate recollection) results in an act of remembering, as the use of *ḏikr* in *Nafs*, IV, 1, p. 167, 17 [p. 10, 20] seems to suggest.

57 See *Nafs*, IV, 3, p. 183, 12–16 [pp. 36, 13–37, 18], where Avicenna begins to treat the activities performed by estimation when it is not accompanied by reason (*al-wahm allaḏī lam yaṣḥabhu l-ʿaql* (…) *aestimationem in quibus non communicet intellectus*]).

58 See *Nafs*, IV, 3, pp. 185, 15–186, 12 [p. 41, 69–85].

59 See *Nafs*, IV, 3, pp. 186, 13–187, 12 [pp. 42, 86–43, 12].

60 As for the similarity/dissimilarity between recollection and learning, cf. Aristotle, *De memoria*, 2, 452 a 4–7: καὶ τούτῳ διαφέρει τὸ ἀναμιμνήσκεσθαι τοῦ πάλιν μανθάνειν, ὅτι δυνήσεταί πως δι'αὑτοῦ κινηθῆναι ἐπὶ τὸ μετὰ τὴν ἀρχήν. ὅταν δὲ μή, ἀλλὰ δι'ἄλλου, οὐκέτι μέμνηται. See also the passage quoted in n. 39 above. These passages have no parallel in the *Kitāb al-Ḥiss wa-l-maḥsūs*. As for the differences among men with

Recollection is said to be similar to learning because, like learning, it involves a transfer (*intiqāl* [*motus*]) from things that are perceived (from outside or from within) to something different from them. This process can be described as a transfer from what is known to what is unknown in order for the latter to become known.

However, recollection differs from learning with respect to the nature of the thing resulting from this transfer and to the method of the transfer. As for the nature of the thing, unlike learning, recollection appears to be a quest (*ṭalab* [*inquisitio*]) aimed at attaining in the future the like of what was attained in the past, i.e. making present and consequently known again what is currently absent and unknown.[61] Learning, by contrast, consists in the fact that from something known, something else, i.e. something new, is attained in the future. As for the method of this process, in the case of learning the transfer from what is known to what is unknown is necessary (here Avicenna speaks of *qiyās* [*syllogismus*] and *ḥadd* [*definitio*]): from certain premises something else necessarily follows. It is a deduction. The process of recollection, by contrast, occurs by way of indications (*ʿalà sabīl ʿalāmāt* [*ad modum signorum*]), namely it does not entail a necessary transfer from *x* to *y* that everyone shares. In this connection, Avicenna provides an example:

> [It is] like the one to whose mind comes a specific book, and who then remembers through it his master who read that book to him. However, from the fact that the form of that book and its meaning (*sc.* the meaning associated with it) come to *his* mind, it does not necessarily follow that that master comes to the mind of every human being (*Nafs*, IV, 3, p. 186, 8–11 [p. 41, 81–4], emphasis mine).[62]

As for the taxonomy of human beings according to their lesser or greater capacity for retention, recollection, learning, and understanding, Avicenna singles out five main groups: (i) those for whom learning is easier than recollection, (ii) those for whom recollection is easier than learning, (iii) those who are strong in retention but weak in recollection, (iv) those who are strong in recollection and weak in retention, and (v) those who are strong in understanding but weak in retention. In particular, Avicenna associates the capacity for retention with a dry temperament, whereas he associates the capacity for understanding with a moist temperament. However, the suitable temperament is not a sufficient condition to determine to which group a human being belongs: the movements (*ḥarakāt* [*motus*]) and the concerns (*himam* [*cogitationes*]) of the soul have to be taken into consideration because they can cause the distraction of the soul from its activities. These movements and concerns are said to change in accordance with age.

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respect to their capacity for remembering, recollecting, learning and understanding, cf. Aristotle, *De memoria*, 1, 449 b6–8; 2, 453 a14–b7. A similar discussion can be found in the *Kitāb al-Ḥiss wa-l-maḥsūs*, see Hansberger, "The Transmission of Aristotle's *Parva naturalia* in Arabic," pp. 23–25; 61–65.

61 This is the only reference to the past in connection with the object of recollection.

62 Avicenna's example is similar to the example of the lyre in Plato's *Phaedo*, 73 d3–10. I owe this reference to Peter Adamson.

4. Conclusion

From the survey of *Nafs*, I, 5, IV, 1, and IV, 3 the answers to the opening questions emerged.

As for the first question, Avicenna assigns to the faculty of memory the same object of estimation, i.e. the *maʿnan*. *Maʿnan* is the meaning of a certain form for its perceiver with no reference to time. In doing this, Avicenna seems to narrow his notion of memory with respect to the Aristotelian one. On the other hand, however, he ascribes the capacity for retaining (*ḥifẓ*), i.e. the activity with which memory is usually associated, to two different faculties, i.e. imagery and memory, having two different objects. Therefore, for Avicenna there are two distinct memories: the memory of *ṣuwar*, or sense-memory, and the memory of *maʿānin*. However, one could also say that what we describe as memory for Avicenna has two parts: the part storing/recollecting forms (imagery) and the part storing/recollecting *maʿānin* (memory). Even though we can regain awareness of either separately, a complete memory seems to occur only when both parts are combined.

As for the second question, namely as to whether retention and recollection are activities of one and the same faculty and, ultimately, of how recollection takes place, the answer is provided at the end of *Nafs*, IV, 1. Recollection is a complex process that is led by estimation. The faculty of memory only provides the prompt disposition to retrieve what has been forgotten. However, it can be also named *recollective* insofar as it makes present again to itself what it has previously stored in itself. However, this activity of recollection is not performed autonomously; rather, it is the result of a process triggered by estimation. In doing this, Avicenna avoids ascribing both a storage and an active function to memory, a move that would have been in contrast with the distinction between perceptive/active and retentive faculties that is made in *Nafs*, I, 5 and iterated elsewhere. Avicenna's distinction between retentive memory and active recollection is in line with Aristotle's position.

Lastly, as to the question concerning who has the capacity for retaining and recollecting, and whether those having one capacity also have the other, Avicenna claims that memory, insofar as it is the capacity for retaining (*ḥifẓ*), belongs to all animals. On the other hand, recollection (*taḏakkur*), insofar as it is the capacity for deliberately retrieving something, is the exclusive prerogative of human beings since it entails awareness and deliberation. Animals, however, are able to remember (*ḏikr*), namely to regain awareness of a retained thing, but without deliberately engaging in its retrieval.

Appendix

Translation of Avicenna's *Kitāb al-Nafs*, IV, 1

Note on the Text

The following translation is based on the text of Avicenna's *Kitāb al-Nafs* edited by Fazlur Rahman in 1959.

I have refrained from interpreting pronouns when their meaning is clear from the context. All expressions that needed to be added in order for the translation to be understandable are in square brackets, as are references to the pagination of Rahman's edition (= [R]).

In general, I have privileged homogeneity and adherence to the Arabic text in the translation as often as possible so that one can grasp at least some of the structural features of the original. This is done on several occasions at the cost of some awkwardness. Whenever a literal translation would have affected the ability to understand the sense of a passage in English, I have opted for less literal solutions to secure intelligibility. I shall not note the numerous cases in which I refrained from translating *wa* at the beginning of a sentence or other particles that do not affect the sense.

The division of the text into sections and subsections is entirely mine.

[(IV.1)]

[Chapter] in which there is a general discourse on the internal senses belonging to animals

[1. Common sense]

[1.1. The necessity of common sense]

[**R163**] Common sense is in reality something different from what it is believed [to be] by those who have thought that common sensible things[63] have a common sense; rather, common sense is the faculty at which all sensible things arrive. For, if there were not a single faculty perceiving what is colored and what is tangible, then we would not be able to distinguish between them, saying that this is not that.

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63 Here Avicenna is referring to common sensibles that, according to Aristotle, can be perceived by different external senses. They are movement, rest, figure, number, and magnitude. See *De an.*, II, 6, 418 a17–9. For Avicenna these common sensibles are not the object of the common sense, see *Nafs*, III, 8, pp. 159, 15–162, 8 [pp. 279, 42–283, 15].

[1.2. The faculty that gathers all sensible things is not the intellect, but another faculty common to all animals]

Suppose that this distinction[64] belongs to the intellect. Then the intellect would unquestionably have to find them together so that it can distinguish between them: for the intellect does not perceive them insofar as they are sensible and according to the way in which they arrive from the sensible thing, as we shall explain later.[65] But we do distinguish between them;[66] therefore, they must be somehow combined in what distinguishes [between them], either in itself or in something different from it.[67] It is impossible that this occurs in the intellect, as you will learn.[68] Thus, this must happen in another faculty.

If in imagery belonging to those beasts having no intellect, which incline, through their desire, towards sweetness, for example, something having a certain form were not combined with [the information] that it is sweet, they would not intend to eat it when they see it. In the same way, if it were not possible for us [humans] [to establish] that this white [person] is this one who sings, we would not affirm that he is the very same individual [person] when we hear his particular singing, and vice versa.

If in animals there were not that in which forms of sensible things are combined, life would be impossible for them: smell would not indicate [**R164**] taste for them, nor would sound indicate taste to them, and the form of a wooden stick would not remind them of the form of pain so that they would avoid it.[69] Therefore, these forms must unquestionably have a single, internal place in which they are combined.

[1.3. Demonstration of the existence of the common sense]

[1.3.1. First argument]

The existence of this faculty might be indicated to us by considering things that indicate that they have an organ other than the external senses. Among those [things] there is that we see that someone who is being spun around[70] imagines that everything rotates. That[71] is either [(a)] an accident occurring in the visible things or [(b)] an

64 i.e. the distinction between what is colored and what is tangible.
65 The reference is to *Nafs*, V, 5.
66 i.e. between sensible things like what is colored and what is tangible.
67 I take the pronoun *-hī* (in respectively *fī ḏātihī* and *fī ġayrihī*) as referring to 'what distinguishes between them'.
68 The reference is to *Nafs*, V, 2.
69 Rahman corrects *minhu*, which he finds in all his MSS to *minhā* because he interprets the pronoun as referring back to *ṣūra*. But it could also be a reference to *alam*. This is how I interpret it. For another reference to "the form of a wooden stick", see *Nafs*, IV, 3, p. 185, 3 [p. 39, 51–2].
70 Reading, with MSS A and D, *al-madūr bihī* for *al-madūriyya*.
71 i.e. the fact that someone who is being spun around imagines that everything rotates.

accident occurring in the organ by means of which vision is accomplished.[72] If it is not in the visible things, it must be in something else. Dizziness is only due to the movement of the vapor in the brain and in the pneuma that is in it. So, the pneuma is made to rotate. Thus, what we have mentioned above occurs in the faculty located in that position.[73]

Likewise, dizziness occurs in the human being from looking at what quickly rotates, as we have mentioned.[74] That does not occur because of something in a part of the eye, nor [because of something] in the pneuma that flows into it. For this reason, we imagine the rapid movement of a punctiform moving thing as straight or circular, as has been stated above.[75]

[1.3.2. Second argument]

[This[76] is also the case] because the representation of deceptive images and the hearing of deceptive sounds occur to those whose sense organs are corrupted or, for instance, whose eyes are closed, and the reason for this is nothing but their representation in that principle.[77] And the imaginings occurring in sleep are [(a)] either due to the impression of the form in the depository retaining the forms — but if that were the case, then it would be necessary that everything that is stored in it be represented in the soul, and not some of them but not some [others], so that only some of them are just as they are seen or heard — [(b)] or [**R165**] their[78] representation occurs in another faculty, and this [other faculty] is either [(ba)] an external sense, or [(bb)] an internal sense. [(ba)] However, the external sense[79] is inactive during sleep, and sometimes the one who imagines colours is someone whose eye has been gouged. [(bb)] So it remains [only] that it is an internal sense. It can be nothing other than the principle of external senses, and that by which the estimative faculty, when it gains predominance and begins to review what is in the depository, reviews it, even if [it occurs] in wakefulness. Then, when their permanence in it[80] is solid, they are

72 Presumably, this refers to what is capable of distinguishing the sensible objects perceived by external senses, which has been mentioned above. See n. 67.

73 The reference seems to be to the existence of a combining faculty that is located in the brain. See also n. 74 below.

74 The reference can be either to *Nafs*, I, 5, p. 44, 11–14 [p. 88, 30–34], which contains the first part of Avicenna's explanation of the difference among external senses, common sense, and imagery concerning perception, or to *Nafs*, III, 8, pp. 156, 14–157, 9 [pp. 275, 59–276, 81], where the same causes of dizziness are mentioned.

75 The reference can be either to *Nafs*, I, 5, pp. 44, 14–45, 2 [pp. 88, 34–89, 43], where the second part of Avicenna's explanation is contained, or to *Nafs*, III, 8, p. 156, 9–13 [p. 275, 52–59], where a similar discourse is made.

76 i.e. the fact that a faculty distinct from the five external senses exists, which is responsible for distinguishing the sensible objects perceived by the external senses.

77 i.e. the representation of deceptive images in the common sense.

78 i.e. of imaginings.

79 Here Avicenna is referring to the five external senses as a whole. For a similar use of *ḥiss* as referring to the five external senses as a whole, see *Nafs*, II, 2, p. 59, 11.

80 i.e. in the faculty.

like what is observed. This faculty is called common sense, and it is the centre of the [external] senses. The branches[81] branch off from it, and the senses lead to it. This is in reality what senses.

[2. Imagery or form-bearing faculty]

However, retaining (*imsāk*) what this [faculty, *sc.* common sense] perceives belongs to the faculty that is called imagery, form-bearing [faculty], and imaginative [faculty]. Sometimes a distinction between imagery and the imaginative [faculty] is [made] in accordance with convention, and we ourselves adopt this distinction. Common sense and imagery are as if they are one single faculty, and as if they do not differ in subject (*fī l-mawḍūʿ*), but in form (*fī l-ṣūra*), for receiving is not the same as retaining (*wa-ḏālika annahū laysa an yaqbala huwa an yaḥfaẓa*). Thus, the form of the sensible thing is retained by the faculty that is called form-bearing [faculty] and imagery,[82] but absolutely no judgement belongs to it, but [only] retention (*ḥifẓ*). The common sense and the external senses judge in some respect or in a certain way, so that one can say that this moving thing is black and that this red thing is sour. On the contrary, what retains is not used to make any judgements about any existing thing, except about what is in itself, [namely,] that in it there is such-and-such a form.

[3. Cogitative or imaginative faculty]

Furthermore, we certainly know that it is in our nature to combine sensible things with [**R166**] each other and to separate them from one another neither according to the form with which we find them from outside, nor together with the assent to the existence of one of them or to its non-existence. So, there must be a faculty in us by means of which we do that. This is the [faculty] that is called 'cogitative' when the intellect makes use of it, whereas [it is called] 'imaginative' when an animal faculty makes use of it.

[4. Estimation]

Furthermore, we sometimes make judgements about sensible things by means of meanings (*maʿānin*) that we do not sense, either [(a)] because they are not sensible at all in their natures, or [(b)] because they are sensible but we do not sense them at

81 Here *šuʿab* (sg. *šuʿba*, branch) refers to the external senses. They can be considered branches of the common sense in the sense that they are the first gate to the external world, through which a first, atomic perception takes place. Next, the common sense, which is said to actually sense, works on these atomic data and renders them somehow meaningful.

82 The sentence is active in Arabic.

the moment of making the judgement. [(a)] As for what is not sensible in its nature, it is like the enmity, badness, and aversion that the sheep perceives in the form of the wolf and, in general, the meaning that turns the sheep away from it, and [like] the benevolence it perceives from its companion and, in general, the meaning that renders it friendly to it. These are things the animal soul perceives, but sensation does not indicate any of them to it.[83] So the faculty by which these things are perceived is another faculty. Let it be called estimation. [(b)] As for what is sensible, we see, for example, something yellow, and then we make the judgement that it is honey and sweet. For this is not brought to it[84] by what is sensing at this time,[85] but it belongs to the genus of what is sensible, though the judgement itself is not sensible at all (even though its parts belong to the genus of what is sensible), and it[86] does not immediately perceive it. It is only by means of it that a judgement is made, in which there might be a mistake. This also belongs to this faculty. In human being estimation has special judgements which include its making the soul deny the existence of things that are neither imaged nor impressed in it,[87] and [making the soul] refuse to grant assent to them.[88] [**R167**] This faculty unquestionably exists in us and is the leading one and the one that makes judgement in animals, a judgement that is not a distinction[89] like the intellectual judgement; rather, it is an imaginative judgement connected with the particular and with the sensible form, and from which many animal activities derive.

[5. Memory and recollection]

It has become common practice to call 'form' whatever sense perceives and 'meaning (*maʿnan*)' whatever estimation perceives,[90] and each of them has [its proper] depository (*ḫizāna*). The depository of what sense perceives is imagery (*al-quwwa al-ḫayāliyya*), and its seat (*wa-mawḍiʿuhā*) is the front [cavity] of the brain. For this reason, when some damage occurs there this class of representation is corrupted with the result that either it conceives forms that do not exist or establishing what exists in it is difficult. The depository of what estimation perceives is the faculty that is called 'retentive (*al-ḥāfiẓa*)', and its origin (*wa-maʿdinuhā*) is the rear [cavity] of the brain. For this reason, when some damage occurs there, a corruption happens in whatever pertains specifically to the retention (*ḥifẓ*) of these meanings. This faculty is also called 'recollective (*mutaḏakkira*)'. It is therefore retentive (*ḥāfiẓa*) in its

83 i.e. to the animal soul.
84 i.e. to estimation.
85 Lit.: For this does not bring it to it (*sc.* estimation) what is sensing at this time (…).
86 i.e. what is sensing.
87 i.e. in estimation.
88 i.e. to things that are neither imaged nor impressed in estimation.
89 In my opinion, what Avicenna is saying here is that, unlike the judgement made by estimation, the intellectual judgement entails a distinction, i.e. it is the result of a dianoetic, discursive thinking, hitting upon the *differentia specifica* (*faṣl*).
90 For the distinction of these two objects, see *Nafs*, I, 5, p. 43, 5–15 [p. 86, 93–6].

preservation of what is in it, whereas it is recollective (*mutaḏakkira*) in the promptness of its disposition to firmly establish it,[91] and [then] to conceive [something] through it by retrieving it when it is lost.

[5.1. How the process of recollection occurs]

[5.1.1. First option: upwards movement]

That[92] happens when estimation turns towards its imaginative faculty, and then begins to review one by one the forms existing in imagery so that it is as if it sees the things of which these are forms. Then, when the form occurs to that[93] with which it perceived the meaning that ceased [existing in it], the meaning appears to it[94] then just as it appeared from outside, and the retentive faculty (*al-quwwa al-ḥāfiẓa*) firmly establishes it in itself just as it did then. There is then remembering (*ḏikr*).

[5.1.2. Second option: downwards movement. Two alternatives]

Sometimes the process goes from the meaning to the form. Thus, the recollected thing, which is sought after, [**R168**] has no relation to what is in the depository of the retentive faculty (*ḥifẓ*), but rather a relation to what is in the depository of imagery. So, its[95] returning [back] is either [(i)] in the way of the return to these meanings that are in the retentive faculty (*fī l-ḥifẓ*) so that the meaning compels the appearance of the form, then the relation to what is in imagery returns back [to the retentive faculty] a second time, or [(ii)] by reverting to the sense.

An instance of the first [case] [is the following]: when you forget the relation [of a meaning] to a form but you had known that relation, you look attentively at the activity that is meant by it. So, when you know the activity, find it, and know which flavor, which colour, and which shape are appropriate for it, through it you firmly establish the relation, are familiar with that,[96] attain it as a relation to a form in imagery, and [consequently] reestablish the relation in memory. For the depository of the activity is the retentive faculty because it[97] is part of the meaning. If, by contrast, that is equally obscure for you from this respect and is not clear, the sense will bring to you the form of the thing, then [the form] returns firmly established in imagery and the relation to it[98] returns firmly established in what retains (*fī llatī taḥfaẓu*).[99]

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91 i.e. what is in it.
92 i.e. recollection.
93 i.e. to estimation.
94 i.e. to estimation.
95 i.e. of what is in imagery.
96 i.e. with the activity.
97 i.e. the activity.
98 i.e. the relation of the form to the meaning.
99 i.e. the faculty of retention, i.e. memory.

[6. Conclusion]

This faculty[100] that combines one form with another, form with meaning and meaning with meaning, is as if it is the estimative faculty in subject (*fī l-mawḍūʿ*), not insofar as it makes judgements but, rather, insofar as it acts in order to arrive at the judgement. Its place (*makānuhā*) has been made the central [cavity] of the brain so that it has a connection with the two depositories of meaning and form. It seems that the estimative faculty is itself cogitative, imaginative, and recollective, and that it is itself the one that makes judgements. Therefore, it is by itself the one that judges, whereas by means of its movements and its activities [**R169**] it is imaginative and recollective. [In particular,] it is imaginative in view of what it does with forms and meanings, whereas it is recollective in view of that in which its action results. The retentive [faculty] is the faculty of its depository. It seems that recollection, which occurs deliberately, is a notion belonging to the human being alone, that the depository of forms is the form-bearing [faculty] and imagery, and that the depository of meanings is the retentive [faculty]. And it is not impossible that the estimative faculty makes judgements by itself, whereas by means of its movements is imaginative and remembering.

100 Here Avicenna is referring to the imaginative faculty, since it is the faculty that is located in the central cavity of the brain.

CARLA DI MARTINO

Mémoire, représentation et signification chez Averroès

Une proposition de lecture

1. Introduction

Aristote consacre à l'étude de la mémoire et de la réminiscence le deuxième opuscule de ses *Parva naturalia*[1] Ces traités, complément et prolongement de la doctrine psychologique exposée dans le *De anima*, ont eu un impact significatif sur la tradition de l'aristotélisme, et en particulier sur l'élaboration, par les auteurs majeurs de la science psychologique arabe, d'une doctrine des sens internes. Ainsi, dans la tradition arabe, les différentes fonctions sensitives deviennent autant de facultés sensibles, distinctes, car plus abstraites ou plus spirituelles que les sens externes, et capables d'assurer des opérations discursives apparentées de la pensée, sans être pourtant des opérations intellectuelles.

Parmi les auteurs arabes qui ont connu et intégré les *Parva Naturalia* d'Aristote dans leur œuvre et dans leur pensée, Averroès a laissé dans la tradition arabo-latine une trace majeure, puisque son *Talkhîṣ kitâb al-ḥiss wa-l-maḥsûs*, épitomé des *Parva naturalia*, fut traduit de l'arabe en latin par Michel Scot au XIII^{e} siècle, et fut connu et largement utilisé par des auteurs comme Albert le Grand et Thomas d'Aquin.[2]

1 Le deuxième opuscule des *Parva naturalia* est connu et édité par les auteurs modernes sous le titre: *De memoria et reminiscentia / De la mémoire et de la réminiscence* (*Περὶ μνήμης καὶ ἀναμνήσεως*). Sur le titre, l'ordre des opuscules et la tradition grecque de ces traités cf. l'introduction de Pierre-Marie Morel à sa traduction: Aristote, *Petits Traités d'Histoire Naturelle*, traduction par Pierre-Marie Morel (Paris: GF Flammarion, 2000), pp. 9–17. Sur la tradition grecque des *Parva Naturalia*, cf. Pierre-Marie Morel, "*Parva naturalia*: tradition grecque," in *Dictionnaire des philosophes antiques*, éd. Richard Goulet, Supplément (Paris: CNRS Éditions, 2003), pp. 366–74.

2 Cf. Averroès, *Talkhîṣ kitâb al-ḥiss wa-l-maḥsûs*, éd. Harry A. Blumberg (Cambridge, MA: Medieval Academy of America, 1972); Averroès, *Compendia librorum Aristotelis qui Parva Naturalia vocantur*, éd. Emily L. Shields et Harry A. Blumberg (Cambridge: Mediaeval Academy of America, 1949); Albertus Magnus, *De nutrimento et nutrito, De sensu et sensato, De memoria et reminiscentia*, éd. Silvia Donati, Editio

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Memory and Recollection in the Aristotelian Tradition: Essays on the Reception of Aristotle's *De memoria et reminiscentia*, ed. by Véronique Decaix, Christine Thomsen Thörnqvist, Turnhout, 2021 (*Studia Artistarum*, 47), p. 93-105
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Le *Talkhîṣ kitâb al-hiss wa-l-maḥsûs* est une synthèse. Il ne contient pas de *lemmata* du texte aristotélicien. Bien qu'il soit délicat, en l'absence du texte arabe des *Parva Naturalia* qui a été lu par Averroès, de distinguer la lettre aristotélicienne de son apport exégétique, sa paraphrase représente un accès privilégié à la tradition arabe de ces traités. En effet, alors que le texte arabe des *Parva naturalia* semble perdu,[3] dans le *Talkhîṣ kitâb al-ḥiss wa-l-maḥsûs* d'Averroès il est possible d'identifier des unités textuelles qu'on peut faire correspondre de manière quasiment certaine à des passages du texte grec des *Parva Naturalia.*

L'un de ces passages concerne la distinction entre 'représentation' et 'mémoire,' exposée par Aristote en *De memoria*, 450b11–451a3.

2. Mémoire et représentation chez Aristote: *De memoria*, 450b11-451a3

En *De memoria* (450b11–451a3), après avoir défini la mémoire et avoir expliqué son fonctionnement, ainsi que son rapport à la sensation (αἴσθησις), au temps et à la représentation (φαντάσια), Aristote se demande si, au moment du souvenir, on se souvient de l'affection (πάθος), conservée suite au mouvement d'altération produit par la forme sensible dans l'organe sensoriel, ou de ce qui l'a engendrée, l'objet sensible d'origine.

Pour y répondre, Aristote revient sur le rapport entre les choses du monde, leurs traces psychiques au moment de la sensation et leur trace psychique éventuelle après la disparition de l'objet sensible d'origine du champ sensoriel du sujet sentant. Aristote précise que:

Coloniensis Bd. 7/2a (Münster: Aschendorff, 2017); Thomas d'Aquin, *Sentencia libri De Sensu et Sensato cuius secundus tractatus est De memoria et reminiscencia*, éd. René Antoine Gauthier, *Opera Omnia* t. 45/2 (Roma – Paris: Editio Leonina, 1985).

3 En 1985, Hans Daiber a identifié dans un manuscrit de la bibliothèque de Rampur un texte qui est probablement une paraphrase du texte arabe des *Parva Naturalia*. Cf. ʿAršī, Imtiyāz ʿAlī Ḫān, "Catalogue of the Arabic Manuscripts in Rampur Raza Library, I-V," (Rampur: Rampur Raza Library Publication), Series n° 13-17, t. IV (1971), pp. 534–35; Hans Daiber, "New Manuscript Findings from Indian Libraries," *Manuscripts of Middle East*, 1 (1986), pp. 26–48. Ce texte est en cours d'édition mais n'est pas encore accessible. Il s'agit en outre d'un manuscrit tardif, puisqu'il est du XVII^e^ siècle, et il est incomplet. Cf. Rotraud. E. Hansberger, "*Kitâb al-ḥiss wa-l-maḥsûs*. Aristotle's *Parva Naturalia* in Arabic Guise," dans *Les 'Parva Naturalia' d'Aristote*, éd. Christophe Grellard et Pierre-Marie Morel (Paris: Publications de la Sorbonne, 2010), pp. 143-62. Sur la tradition arabe des *Parva Naturalia* cf. aussi: Rotraud E. Hansberger, "How Aristotle Came to Believe in God-Given Dreams: The Arabic Version of *De Divinatione per somnum*," in L. Marlow (éd.), *Dreaming Across Boundaries. The Interpretation of Dreams in Islamic Lands* (Ilex Foundation - Harvard U. P., Washington D.C. 2008), pp. 50-77; et sa thèse doctorale: "The Transmission of Aristotle's *Parva Naturalia* in Arabic," D.Phil. Thesis, University of Oxford, 2007; Carla Di Martino, "Les *Parva Naturalia* dans la tradition arabe," in *Dictionnaire de Philosophes Antiques*, dirigé par Richard Goulet (Paris: CNRS Edition), Suppl. I, pp. 260-6; Börje Bydén, "Introduction: The Study and Reception of Aristotle's *Parva naturalia*," in *The 'Parva Naturalia' in Greek, Arabic and Latin Aristotelianism. Supplementing the Science of the Soul*, éd. Börje Bydén et Filip Radovic (Dordrecht: Springer, 2018), pp. 1–50.

1) s'il y a production d'une trace psychique au moment de la sensation, et que cette trace, le πάθος, est comme une empreinte et une inscription, penser qu'on se rappelle d'autre chose que de cette trace n'aurait pas de sens.
2) celui qui fait acte de mémoire regarde ce πάθος et il en a la sensation.
3) si cet acte de mémoire doit être relatif aux choses, même si elles ne sont plus présentes, et puisqu'aucun πάθος ne peut se produire sans l'action des choses externes, il faut, pour que l'acte de mémoire ait un contenu, que les deux alternatives se réalisent en même temps: le souvenir doit être souvenir de la chose *et* de sa trace psychique.

Or cela n'est possible, explique Aristote, que parce que la trace psychique de la chose lorsque la chose est présente, et la trace de cette même chose lorsque la chose n'est plus présente, sont une seule et même trace, ce qui ne peut se produire que sous l'action de la chose sensible, et nous conduit ainsi directement à la chose sensible. Mais le nom de cette trace varie — cette même trace prend des noms différents — πάθος, φάντασμα ou μνημόνευμα - selon qu'elle soit objet de sensation (αἴσθησις), représentation (φαντάσια) ou mémoire (μνήμη).

Et tout comme le πάθος, le φάντασμα et le μνημόνευμα sont une seule et la même affection, ainsi αἴσθησις, φαντάσια et μνήμη sont une et la même faculté — l'αἴσθησις — envisagée sous des points de vue différents — et non des facultés différentes.

Cette explication laisse ouverte une question majeure. Si, en effet, sensation, représentation et mémoire ne sont que des noms différents de la même faculté, et que πάθος, φάντασμα et μνημόνευμα ne sont que des noms différents du même objet de connaissance, comment l'âme saurait les distinguer? Comment saurait-on si on est en train de percevoir, se représenter, ou se souvenir?

Et surtout, quelle est la nature du πάθος produit sous l'action de la chose externe?

En effet, la question: "se souvient-on de la chose ou de sa trace psychique?" nous renvoie à la question plus générale: "connaissons-nous les choses du monde ou leurs traces psychiques?"

Cette interrogation générale, qui dirige toute la problématique de ce qu'on pourrait aujourd'hui qualifier de 'thème intentionnel,' ne saurait trouver une réponse exhaustive ici.[4]

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4 Nombreux sont les passages du *corpus* aristotélicien qui ont nourri des interrogations connexes au thème intentionnel. Leur apport au débat intentionnel fut si différent qu'il devient légitime, voire nécessaire, lorsqu'on s'interroge sur les origines aristotéliciennes de ce débat, de préciser de quel Aristote les auteurs impliqués dans ce débat se revendiquent-ils. Cf. Claudio Majolino, "Intentionnalités, ontologies: quel Aristote en héritage? Esquisse d'une cartographie militaire," *Revue Philosophique de Louvain* (2016), pp. 485–546. Pour un aperçu bibliographique de nombreuses études sur les possibles sources, aristotéliciennes et anciennes, de l'intentionnalité cf. Richard Sorabji, "From Aristotle to Brentano: The Development of the Concept of Intentionality," in *Aristotle and The Later Tradition*, éd. Henry Blumenthal et Howard Robinson (Oxford: *Oxford Studies in Ancient Philosophy*, 1991), pp. 227–59; Victor Caston, "Aristotle and the Problem of Intentionality," *Philosophy and Phenomenological Research*, 58 (1998), pp. 249–98; *Ancient and Medieval Theories of Intentionality Ancient and Medieval Theories of Intentionality*, éd. Dominik Perler (Leiden : Brill, 2001); Jean-Luc Solère, "Tension et intention: Esquisse

Aristote explique ici la différence entre le couple αἴσθησις / πάθος, l'affection en présence de la chose, et les autres manières de concevoir la trace psychique, par la prise en compte de la dimension temporelle. Une fois que la chose sensible a disparu, cette même affection résiste dans l'âme, et elle prend des noms différents. Ainsi, il faudra maintenant expliquer pourquoi et quand le fait de 'regarder' cette trace psychique, et donc de l'appréhender par le sens, est un acte de représentation, et qu'on appelle la trace psychique 'restée' dans l'âme : φάντασμα, et quand c'est un acte de mémoire, et qu'on appelle cette trace: μνημόνευμα.

Ainsi écrit Aristote:

> οἷον γὰρ τὸ ἐν πίνακι γεγραμμένον ζῷον καὶ ζῷόν ἐστι καὶ εἰκών, καὶ τὸ αὐτὸ καὶ ἓν τοῦτ' ἐστὶν ἄμφω, τὸ μέντοι εἶναι οὐ ταὐτὸν ἀμφοῖν, καὶ ἔστι θεωρεῖν καὶ ὡς ζῷον καὶ ὡς εἰκόνα, οὕτω καὶ τὸ ἐν ἡμῖν φάντασμα δεῖ ὑπολαβεῖν καὶ αὐτό τι καθ' αὑτὸ εἶναι καὶ ἄλλου [φάντασμα]. ᾗ μὲν οὖν καθ' αὑτό' θεώρημα ἢ φάντασμά ἐστιν, ᾗ δ΄ ἄλλου, οἷον εἰκὼν καὶ μνημόνευμα. ὥστε καὶ ὅταν ἐνεργῇ ἡ κίνησις αὐτοῦ, ἂν μὲν ᾗ καθ'αὑτό ἐστι, ταύτῃ αἰσθάνηται ἡ ψυχὴ αὐτοῦ, οἷον νόημά τι ἢ φάντασμα φαίνεται ἐπελθεῖν· ἂν δ' ᾗ ἄλλου καὶ ὥσπερ ἐν τῇ γραφῇ ὡς εἰκόνα θεωρεῖ καί, μὴ ἑωρακὼς τὸν Κορίσκον, ὡς Κορίσκου. ἐνταῦθά τε ἄλλο τὸ πάθος τῆς θεωρίας ταύτης καὶ ὅταν ὡς ζῷον γεγραμμένον θεωρῇ, ἔν τε τῇ ψυχῇ τὸ μὲν γίγνεται ὥσπερ νόημα μόνον, τὸ δ' ὡς ἐκεῖ ὅτι εἰκών, μνημόνευμα.[5]

Ce texte pourrait être schématisé ainsi:

— Un animal dessiné est 1) un animal 2) la copie d'un animal.

De même:

— Toute représentation est 1) une représentation par soi et 2) la représentation de quelque chose.

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de l'histoire d'une notion," in *Questions sur l'intentionnalité*, éd. Lambros Couloubaritsis and Antonino Mazzù (Paris: Vrin, 2008), pp. 59–124; Deborah Black, "Intentionality in Medieval Arabic Philosophy," *Quaestio*, 10 (2010), pp. 65–81.

5 Cf. Aristote, *De memoria*, 450b11–451a3: "Il en va en effet comme pour l'animal dessiné sur une tablette. Il est à la fois un animal et une copie, et tout en étant une seule et même chose, il est les deux choses à la fois, bien que celles-ci ne soient pas identiques, et l'on peut le regarder aussi bien comme animal que comme copie. De même aussi faut-il concevoir la représentation qui est nous à la fois comme quelque chose par soi et comme la représentation de quelque chose d'autre. En tant donc qu'elle est par soi, elle est objet de regard ou représentation, mais en tant qu'elle est la représentation de quelque chose d'autre, elle est une sorte de copie et objet de mémoire. De ce fait encore, lorsque son mouvement s'actualise, en tant que cette représentation est quelque chose par soi, l'âme pour cette raison la perçoit et elle se présente comme une sorte de pensée ou comme une représentation. Mais en tant que la représentation se rapporte à autre chose, l'âme la regarde aussi comme une copie, comme dans une peinture, de même que, sans avoir vu Coriscos, on voit Coriscos en copie. Dans ce cas, l'affection produite via ce regard est différente de celle qui se produit quand on regarde un animal dessiné; et dans l'âme également, l'une se produit comme pensée, l'autre, comme quand il s'agit d'une copie, c'est un souvenir" (trad. par Pierre-Marie Morel légèrement modifiée).

En tant que 1) représentation par soi, la représentation est un objet possible de regard de l'âme, et une pensée potentielle[6]; en tant que 2) représentation de quelque chose, quand l'âme la regarde, elle est une copie de quelque chose et un objet de mémoire.

Ainsi la même représentation, regardée comme représentation de quelque chose et dans son rapport de copie de quelque chose, est un souvenir: c'est le regard de l'âme qui en fait un souvenir. Une représentation sera une représentation simple, par soi, et une pensée potentielle, si elle est envisagée et regardée en soi, dans sa nature psychique pure et sans lien avec la chose qui l'a engendrée. Elle sera un souvenir précisément quand elle est regardée comme la copie de la chose du monde qui a engendré le πάθος, l'affection sensible qui, même lorsque la chose n'est plus présente, réside dans l'âme.

Aux trois fonctions de la αἴσθησις répondent ainsi trois noms différents, selon que le regard de l'âme porte sur le πάθος en présence de la chose, ou sur cette même affection en absence de la chose, comme simple représentation, φάντασμα, ou comme copie, auquel cas c'est un acte de mémoire sur un objet de mémoire, appelé μνημόνευμα.

3. Mémoire et représentation chez Averroès

3.1. Rappel sur la doctrine des sens internes chez Averroès

Pour évaluer la paraphrase d'Averroès de ce passage cité du *De memoria* d'Aristote, il est nécessaire de rappeler au moins les lignes générales de sa doctrine des sens internes.[7]

Dans la doctrine d'Averroès, la forme sensible (*ṣûrah*), perçue par les sens externes, acquise dans l'âme, est ultérieurement manipulée par les facultés internes de l'âme. Elle est perçue comme une représentation (*khayâ*: représentation; *ṣûrah mutakhayyilah*: forme représentée) par la faculté de la représentation (*al-qûwah al-mutakhayyilah*), aussi appelée faculté formatrice (*al-qûwah al-muṣawwirah*), et qui est capable de représenter la forme en absence de l'objet sensible d'origine. Cette représentation

6 La représentation en soi est aussi une pensée, car l'âme ne pense jamais sans représentations: c'est le regard différent de l'âme qui en fait une pensée. La bibliographie sur ce sujet est immense: une revue bibliographique sur le sujet dépasse le cadre et les finalités de cet essai.

7 Alors que chez Aristote perception, représentation et mémoire ne sont que de différentes opérations de la même faculté, l'αἴσθησις, la science psychologique arabe élabore, à partir des textes d'Aristote, une doctrine de la connaissance sensible où à différentes opérations sensibles correspondent des facultés différentes: les sens internes. Nombreuses sont les études consacrées à ce fait. Entre autres: Carla Di Martino, *Ratio Particularis. Doctrines des sens internes d'Avicenne à Thomas d'Aquin* (Paris: Vrin, 2008); John A. Gasson et Magda B. Arnold, "The Internal Senses – Functions or Powers?," *Revue Thomiste*, 26 (1963), pp. 1–34; E. Ruth Harvey, *The Inward Wits. Psychological Theory in the Middle Ages and the Renaissance*, (London: The Warburg Institute – University of London, 1975); Harry A. Wolfson, "The Internal Senses in Latin, Arabic and Hebrew Philosophical Texts," *Harvard Theological Review*, 28 (1935), pp. 69–133. Pour les sens internes chez Averroès, cf. Deborah Black, "Memory, Individuals, and the Past in Averroes' Psychology," *Medieval Philosophy and Theology*, 5 (1996), pp. 161–87; Michael A. Blaustein, "Averroes on the Imagination and the Intellect" (Thèse non publiée, Harvard University, 1984).

est conservée par la faculté de la conservation (*hifz; hâfiz*). La conservation des représentations des choses perçues est la seule forme de mémoire dont les animaux sont capables: ici s'arrêtent leurs capacités sensorielles.

Pour les êtres humains, le processus va plus loin: une troisième faculté, appelée faculté cogitative (*al-qûwah al-mufakkirah*) sépare, par abstraction, le *ma'nâ* de la forme représentée de la forme représentée; et une quatrième faculté interne, la mémoire (*dhikr* ou *dhâkirah*) perçoit et conserve le *ma'nâ*.

Quand il y a souvenir de quelque chose, la mémoire re-présente le *ma'nâ*, et la cogitative le réassocie à la représentation ou forme représentée dont il avait été abstrait.

Ainsi, quand la forme sensible s'imprime dans les organes sensoriels, cette forme (*ṣûrah*) est perçue; puis elle reste dans l'âme non telle qu'elle a été perçue, mais sous une nature plus abstraite, comme forme représentée ou représentation; cette forme représentée contient de manière latente ce qu'Averroès appelle *ma'nâ*. Ce *ma'nâ*, sans la forme représentée, dont il a été séparé et abstrait, est connu et conservé par la mémoire. Seuls les êtres humains ont accès au *ma'nâ*: pour eux, il y aura appréhension et conservation du *ma'nâ*; pour les animaux non-rationnels, la mémoire n'est rien d'autre que conservation de formes représentées.

Même si on peut remarquer un certain flottement lexical dans le domaine de la perception et représentation de la forme imaginée (*ṣûrah mutakhayyilah/ khayâl/ qûwah muṣawwirah/ qûwah mutakhayyilah/ takhayyul*), cette opération est quasiment toujours exprimée par Averroès par des mots dérivés de la racine arabe *khyl; la conservation de la forme imaginée, ou mémoire animale, par la racine *hfz; la perception, conservation et re-présentation du *ma'nâ*, ou mémoire humaine, par la racine *dhkr.

Cette doctrine, telle que nous venons de la rappeler dans ses lignes générales, est exposée par Averroès de manière cohérente à maintes reprises dans ses œuvres, et en particulier dans son *Talkhîṣ kitâb al-ḥiss wa-l-maḥsûs*.

3.2. Averroès commentateur du De memoria *d'Aristote: mémoire et représentation*

Ainsi Averroès paraphrase, dans son *Talkhîṣ kitâb al-ḥiss wa-l-maḥsûs*, les propos d'Aristote du *De memoria*, 450b11–451a13:

> Aristote explique clairement que cette faculté, je veux dire la mémoire (*al-dhâkirah*), est différente de la faculté formatrice (*al-qûwah al-muṣawwirah*), et qu'elles sont deux par essence et par le sujet. Justement nous percevons parfois le *ma'nâ* de la forme représentée (*ṣûrah mutakhayyilah*) sans la forme représentée, et parfois nous percevons la forme (*ṣûrah*) sans en abstraire le *ma'nâ* de la forme. C'est pourquoi nous pouvons conserver plusieurs choses à la fois, mais nous ne pouvons pas les représenter. Et nous avons déjà dit que la faculté de la conservation (*hifz*) et de la remémoration (*dhikr*) sont une par le sujet, deux par l'aspect, car ce que perçoit la faculté représentative de ce précis individu Zayd n'est que ce qu'en peint le

peintre dans la conservation, et ce que perçoit la faculté de la remémoration n'est que le *ma'nâ* de cette peinture.[8]

Toute forme représentée, explique Averroès, est en soi une forme représentée, mais elle contient aussi, accessible aux êtres humains seulement, et de manière latente et implicite, le *ma'nâ* de la chose. En tant que forme représentée et en soi, la forme représentée d'un individu, par exemple, de Zayd, est perçue par la faculté de la représentation et conservée par la faculté de la conservation (mémoire animale); alors que ce que perçoit et conserve la faculté de la mémoire humaine de la forme représentée est appelé *ma'nâ*.

Ainsi, si nous comparons ce passage d'Averroès avec le texte d'Aristote qu'il est en train de commenter, le résultat est le suivant:

1) La représentation simple ou par soi (φάντασμα καθ' αὑτό) d'Aristote, est chez Averroès représentation et forme représentée: il s'agit de la forme sensible conservée. Ici s'arrêtent les capacités sensibles des animaux; la mémoire animale n'est que conservation de cette représentation.
2) Cette même représentation, quand l'âme humaine la regarde comme représentation et copie d'autre chose (φάντασμα ἄλλου), et pour que l'âme puisse le concevoir de la sorte, devient un objet différent, plus abstrait, appelé *ma'nâ* et perçu par la faculté de la mémoire.

Ce passage d'Averroès a déjà été remarqué par la critique et son rapport au texte d'Aristote a déjà été étudié.[9] Mais pourquoi Averroès nomme cette modalité d'existence de la forme dans l'âme: *ma'nâ*, et qu'est que cela implique?

3.3. Averroès critique d'Avicenne: ma'nâ et représentation

Dans ses écrits psychologiques, Averroès utilise un lexique qui a déjà une histoire dans la science psychologique arabe.

En effet, Avicenne, avant lui, avait déjà distingué la perception de la forme (*ṣûrah*) des choses du monde et la perception de leur *ma'nâ*; il avait nommé les facultés sensibles liées à la représentation et conservation de la forme par des mots derivés de la racine *khyl; avait nommé la faculté chargée de la conservation du *ma'nâ* par des mots derivés de la racine *dhkr; avait introduit l'idée que l'âme humaine est capable d'opérations sensibles plus élaborées et proches d'une forme de rationalité, et associé cette forme de discursivité sensible à la racine *fkr.

Avicenne avait une conception très différente du *ma'nâ* des choses. Dans le très célèbre exemple du loup et de la brebis, Avicenne explique que lorsque, par exemple, une brebis perçoit un loup, les sens externes de la brebis perçoivent la forme (*ṣûrah*) du loup, par exemple, sa couleur et sa taille; et une faculté différente, nommée faculté estimative (*qûwah al-wahmiyyah* ou *wahm*), perçoit le *ma'nâ* du

8 Averroès, *Talkhîṣ*, pp. 40-41. Je traduis et je souligne.
9 Cf. Deborah Black, "Memory;" Carla Di Martino, *Ratio Particularis*, p. 52.

loup directement dans le loup, et sans passer par les sens externes. La brebis perçoit ainsi par exemple, la dangerosité d'un loup, et c'est en réaction à l'appréhension du *maʿnâ* du loup, non de sa forme sensible, que la brebis prend la fuite et que la survie de son espèce et assurée.[10]

Ainsi, forme et *maʿnâ* sont pour Avicenne deux objets sensibles différents et indépendants, et en conséquence, les facultés chargées de les percevoir sont des facultés différentes. Ces facultés agissent en saisissant l'objet qui leur est propre directement dans l'objet particulier, et leur fonctionnement est le même chez tous les êtres sensibles, humains ou animaux.

En revanche, pour Averroès, *ṣûrah* et *maʿnâ* correspondent à deux modes d'existence de la même forme dans l'âme. La (*ṣûrah*) perçue par les sens externes pénètre dans l'âme, et ici les facultés psychiques internes la retravaillent par abstraction pour en faire un objet de plus en plus spirituel. Ainsi, la forme devient représentation, puis la représentation devient *maʿnâ*: il s'agit d'un processus d'analyse et abstraction sans solution de continuité. Rien ne rentre dans l'âme autrement que par les sens externes. La *ṣûrah* contient la représentation qui contient le *maʿnâ.* Les facultés internes se chargent de ce "changement de mode d'existence" qui semble ainsi se positionner à mi-chemin entre la position d'Aristote — même objet, "point de vue" différent —, et celle d'Avicenne — deux objets différents saisis séparément dans le monde extérieur. Il s'agit néanmoins d'un chargement de nature: la forme matérielle devient spirituelle, puis de plus en plus spirituelle: ainsi, *en tant qu'objet de connaissance*, la forme évolue et change, et les facultés appelées à prendre en charge ces différents modes d'existence de la forme dans l'âme sont des facultés différentes. Pour Averroès, seuls les êtres humains sont capables d'atteindre le *maʿnâ.*

Averroès est parfaitement conscient d'utiliser un lexique qui avait reçu, grâce à Avicenne, un usage technique précis, et de l'utiliser d'une manière radicalement différente, pour une lecture absolument différente d'Aristote. Rares sont les passages où Averroès cite explicitement Avicenne pour le critiquer, mais l'un de ces passages se trouve précisément quelques lignes avant celui que nous analysons ici.

Dans les paragraphes immédiatement précédents, Averroès décrit la réminiscence comme une mémoire volontaire, exclusivement humaine, et comme le processus de synthèse des données sensibles précédemment abstraites par les sens internes: l'esprit doit alors juger qu'un certain *maʿnâ* correspond à une certaine représentation. Il s'agit du processus inverse de celui accompli par les sens au moment de la perception, quand un *maʿnâ* avait été abstrait d'une représentation par la faculté cogitative. Seuls les êtres humains sont, sous l'influence de l'intellect, capables de ce processus car seuls les êtres humains possèdent, sous l'influence de l'intellect, la faculté de la cogitative.

Ainsi, après avoir expliqué ce processus, Averroès conclut:

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10 Avicenne, *De anima*, II.5. Cf. Avicenna, *De anima, being the Psychological Part of Kitâb al-Shifâ*, éd. Fazlur Rahman (London – New York – Toronto: Oxford University Press, 1959/1970). Cf. Deborah Black, "Estimation (*Wahm*) in Avicenna: The Logical and Psychological Dimensions," *Dialogue*, 22 (1993), pp. 219–58 ; Deborah Black, "Estimation and Imagination. Western Divergences from an Arabic Paradigm," *Topoi*, 19 (2000), pp. 59–75; Carla Di Martino, *Ratio Particularis*, chapitre 1.

> Quant à juger que ce *maʿnâ* appartient à cette représentation, ce jugement, chez l'homme, appartient à l'intellect, puisque chez l'homme c'est l'intellect qui juge, par affirmation ou par négation; chez les animaux doués de mémoire, c'est quelque chose de semblable à l'intellect. C'est parce que cette faculté chez l'humain est cogitation et réflexion (*ruʾya*), qu'il est à même d'évoquer des souvenirs. Quant aux autres animaux, cela est un fait naturel, c'est pourquoi les autres animaux sont capables de conservation mais non de remémoration. Et il n'y a pas de nom pour cette faculté chez les animaux, et c'est cette faculté qu'Avicenne appelle estimative. Grâce à cette capacité, les animaux fuient instinctivement ce qui leur nuit, même s'ils ne l'ont jamais perçu auparavant.[11]

Pour Averroès il n'y a pas de nom, chez les animaux, pour une faculté qui serait chargée de leur livrer une connaissance en réaction à laquelle ils fuient ce qui leur nuit, sans même le percevoir par les sens externes. Rien, en effet, pour Averroès, ne rentre dans l'âme autrement que par les sens. Comme il est précisé dans ce texte, les animaux agissent de la sorte par nature, c'est-à-dire par instinct, et non suite à une connaissance qui leur serait livrée par un autre mode de perception des choses, tel celui qu'Avicenne attribue à la faculté estimative.

La faculté estimative était, chez Avicenne, précisément la faculté chargée de percevoir, chez les animaux, ce qui leur nuit, comme la dangerosité du loup, et cette information avait été nommée par Avicenne *maʿnâ*.

Pour Averroès, chez les animaux, il ne s'agit pas d'une connaissance acquise par les sens — ils n'ont pas besoin de l'apprendre, ils le savent par nature.

Qu'est-ce qu'Averroès appelle alors *maʿnâ*?

3.4. Maʿnâ, représentation et signification. Quel Aristote lisait Averroès?

Averroès critique la notion de *maʿnâ* élaborée par Avicenne. Il critique le fait que les animaux soient capables de percevoir le *maʿnâ* des choses, et que leur comportement de survie soit le résultat d'un acte de connaissance; et même que les animaux soient dotés d'une faculté, appelée estimative, capable de percevoir d'autre aspects des choses que leur forme, perçue ou représentée. En outre, Averroès considère que le fait de pouvoir associer un certain *maʿnâ* avec une certaine représentation n'est possible que chez les humains car cette opération ne peut s'accomplir que sous l'influence de l'intellect. Il est clair qu'il s'agit d'une notion en jeu uniquement dans l'âme humaine.

Pourquoi Averroès appelle-t-il *maʿnâ* l'objet de la mémoire humaine? Pourquoi utiliser un terme qu'Avicenne a rendu si technique, avec le risque de confusion que cela peut comporter?

L'explication la plus simple est sans doute le fait que le terme *maʿnâ* apparaît dans les œuvres psychologiques d'Aristote. Averroès l'emploie parce qu'il le lit dans les

11 Averroès, *Talkhîṣ*, p. 39.

versions arabes d'Aristote.[12] Le texte arabe des *Parva naturalia* utilisé par Averroès n'étant pas disponible, il n'est actuellement pas possible de vérifier si et comment le mot maʿnâ apparaît dans ce passage précis du traité. Il y existe cependant un passage dans le corpus aristotélicien arabe, où le traducteur/adaptateur arabe utilise le terme *maʿnâ*, et qui est susceptible de nous donner des éléments de réponse plus précis sur les raisons qui ont pu amener Averroès à utiliser le terme maʿnâ, et à en faire l'objet propre de la mémoire, mais seulement de la mémoire humaine.

Lorsqu'il introduit sa critique d'Avicenne, Averroès est en train d'expliquer que comme la perception se fait par une sorte d'analyse de la forme, perçue par les différentes facultés internes de l'âme de manière de plus en plus abstraite et spirituelle, ainsi de même, la mémoire peut se concevoir comme une sorte de synthèse sensible, ou reconstitution de la forme par réassociation des différentes couches sensibles qui avaient été analysées — et écartées — au moment de sa perception. Ainsi, le *maʿnâ* est à nouveau associé à la représentation dont il avait été abstrait auparavant, et cette association est un *jugement* qui "appartient à l'intellect, puisque chez l'humain c'est l'intellect qui juge, par affirmation ou par négation".

La notion de *maʿnâ* et son rôle dans le processus du souvenir humain, miroir du processus de la perception, est donc liée à la capacité, intellectuelle et humaine, de *juger*, par *affirmation* et par *négation*.

Or la nature et les modalités d'opération comme l'affirmation et la négation sont précisément étudiées par Aristote dans le *De interpretatione*.

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12 Le texte arabe du *De anima* nous est parvenu par deux traditions textuelles: une version arabe, publiée par ʾAbd al-Rahman Badawî en 1954, et une version arabo-latine, contenue dans le *Grand Commentaire de l'âme* d'Averroès, dont le texte arabe est perdu, mais qui nous est conservée dans la traduction latine de Michel Scot (vers 1225). Cf. *Arisṭûṭâlîs, fîʿl-nafs*, éd. par ʾAbd al-Rahman Badawî (Le Caire, 1954); *Averrois Cordubensis Commentarium Magnum in Aristotelis De Anima libros*, éd. F. Stuart Crawford (Cambridge: *Corpus Commentariorum Av. In Arist.*, 6/1, 1953). Pour la tradition arabe du *De anima*, cf. Abdelali Elamrani-Jamal, "Le *De anima* dans la tradition arabe," in *Dictionnaire de Philosophes Antiques*, éd. Richard Goulet (Paris: CNRS Edition), pp. 346–58. Il suffit de parcourir ces textes pour vérifier que le terme *maʿnâ* (traduit de manière technique et quasiment systématique en latin par *intentio*) y apparaît: les auteurs arabes le lisaient dans le texte d'Aristote, ainsi, même si son emploi par le traducteur/adaptateur arabe n'est pas technique et que ce terme ne correspond pas toujours au même terme grec, les auteurs arabes ne pouvaient que considérer le terme *maʿnâ* comme étant terme aristotélicien.

Par ailleurs, pour étudier l'émergence du terme *maʿnâ* dans le corpus aristotélicien arabe, il faudrait également étudier l'emploi des termes associés à ce dernier, notamment les mots dérivés des racines *fkr et *whm, dont sont issus les noms des facultés cogitative (*fkr) et estimative (*whm). Bien qu'une cartographie complète reste à faire, l'émergence du terme *maʿnâ* dans le corpus de l'*Aristoteles Arabus* a déjà été signalée. Le rôle de la faculté cogitative chez Averroès a également été objet d'études. Une revue bibliographique de ces études irait au-delà des propos de cette contribution. L'article de Richard C. Taylor reste un travail de référence, cf. Richard C. Taylor, "*Cogitatio*, *Cogitativus* and *Cogitar*: Remarks on the Cogitative Power in Averroes," in *Rencontres de Philosophie Médiévale*, éd. Jacqueline Hamesse et Carlos Steel (Turnhout, Belgium: Brepols, 2000), pp. 111-46. Cf. aussi Rotraud E. Hansberger, "Averroes and the 'Internal Senses'," in Peter Adamson. & Matteo Di Giovanni (éds.), *Interpreting Averroes: Critical Essays* (Cambridge: Cambridge University Press, 2019), pp. 138-57; David Wirmer, "*Der Begriff der Intention und seine erkenntnistheoretische Funktion in den De-anima-Kommentaren des Averroes*," in *Erkenntnis und Wissenschaft. Probleme der Epistemologie in der Philosophie des Mittelalters*, Matthias Lutz-Bachmann, Alexander Fidora et Pia Antolic-Piper (éds.) (Berlin: De Gruyter, 2004), pp. 35-67.

L'incipit grec de ce texte est connu.[13] Ainsi on peut lire dans sa traduction / adaptation arabe:

> (…) les choses dont est signe premièrement ce qui est exprimé par le son vocal — et il s'agit des traces de l'âme — sont une seule chose et la même chose pour tous. Et les choses dont ces traces de l'âme sont des ressemblances — c'est à dire les *maʿânî* — sont aussi les mêmes pour tous.[14]

Ainsi, dans la version arabe du *De interpretatione* Averroès lisait que les traces psychiques des choses sont à la fois "ressemblances" et *maʿânî* des choses du monde.

Averroès a compris ce passage comme suit:

> Les mots qui sont employés dans le langage sont premièrement les signes des *maʿânî* qui sont dans l'âme, et les lettres qui sont écrites sont premièrement les signes de ces mots. Et de même que les lettres écrites — la graphie, je veux dire — ne sont pas en elles-mêmes uniques pour toutes les nations, de même les mots qui sont employés dans l'expression des *maʿânî* ne sont-ils pas en eux-mêmes uniques auprès de toutes les nations. Et c'est pourquoi les deux modes de désignations que voilà se font par convention, non par nature. Quant aux *maʿânî* qui sont dans l'âme, elles sont par elles-mêmes uniques pour tous, de même que les étants, dont les *maʿânî* qui sont dans l'âme sont les traces et les signes, sont uniques et sont par nature pour tous.[15]

Les paroles, explique Averroès, sont des signes des *maʿânî* dans l'âme, qui en tant que traces et signes des choses du monde, sont capables de porter un double contenu, psychique et sémantique. Le rapport entre *maʿâni* et paroles est conventionnel. Le rapport entre *maʿânî* et choses, quant à lui, se fait par nature, car chaque forme perçue,

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13 Cf. Aristote, *De interpretatione*, I, 16a1–14: "Les sons émis par la voix sont les symboles des états de l'âme, et les mots écrits les symboles des mots émis par la voix. Et de même que l'écriture n'est pas la même chez tous les hommes, les mots parlés ne sont pas non plus les mêmes, bien que les états de l'âme dont ces expressions sont les signes immédiats soient identiques chez tous, comme sont identiques aussi les choses dont ces états sont les images. Ce sujet a été traité dans notre livre *de l'Âme*, car il intéresse une discipline différente" (trad. Tricot 1936).

14 Le texte arabe du *De interpretatione* a été publié par Badawî en 1948. Cf. *Manṭiq Arîstû*, éd. par 'Abd al-Rahman Badawi (Le Caire: 1948).
Ce texte est disponible en ligne: http://folk.uio.no/amundbjo/grar/interpretatio/texts/Badawi_Interpretatio.pdf. Le passage qui nous intéresse se trouve à la page 3. Je traduis. Qu'il s'agisse d'une glose interposée, ou d'un acte volontaire d'exégèse, force est de constater que le traducteur / adaptateur arabe a inséré dans le texte d'Aristote le terme *maʿnâ*. Il y aurait bien évidemment beaucoup de choses à dire sur ces quelques lignes et sur la version arabe du *De interpretatione*. Cela irait au-delà des propos de cette contribution et sera l'objet d'une autre étude. Pour la tradition arabe du *De interpretatione*, cf. Henri Hugonnard Roche, *Sur la tradition syro-arabe de la logique péripatéticienne, Traduction et traducteurs au Moyen Âge* (Paris: Éditions du CNRS, 1989), pp. 3–14; Henri Hugonnard Roche et Abdelali Elamrani-Jamal, "L'Organon. Tradition syriaque et arabe," in *Dictionnaire des Philosophes Antiques*, dirigé par Richard Goulet (Paris: Éditions du CNRS, 2003), pp. 502–28.

15 *Cf. Ibn Rushd, Talhîs Kitâb al-'Ibârâ, éd. Gérard Jéhamy, t. 1, p. 79 (trad. Benmakhlouf – Diebler légèrement modifiée; cf. Averroès, Commentaire moyen sur le De interpretatione, traduction par Ali Benmakhlouf et Stéphane Diebler (Paris: Vrin, 2000).*

comme l'explique Averroès dans ses écrits sur l'âme, laisse une trace psychique qui est une représentation contenant un *maʿnâ* — sauf que, la perception de ce *maʿnâ* n'est pas accessible à tous, mais uniquement aux êtres humains.

Le mot arabe *maʿnâ* est souvent traduit dans les langues modernes par des calques de sa traduction latine médiévale: *intentio*.[16] En langue arabe, le mot *maʿnâ* vient de la racine *ʿny qui définit le domaine sémantique de la signification. Ainsi, littéralement, le *maʿnâ* de quelque chose est sa signification, sa notion, et ce que la chose indique et veut dire.

Dans sa paraphrase du *De interpretatione*, Averroès retient le sens sémantique du mot. Valoriser le sens strictement sémantique du mot *maʿnâ* et comprendre ce terme au sens de la 'signification' des choses pourrait être une clé intéressante pour une nouvelle interprétation de la doctrine psychologique d'Averroès et un élément pour comprendre la raison pour laquelle Averroès utilise ce terme en vue de définir l'objet propre de la mémoire humaine.

Ainsi lirait-on dans sa paraphrase du *De memoria*:

> Aristote explique clairement que cette faculté, je veux dire la mémoire, est différente de la faculté formatrice, et qu'elles sont deux par essence et par sujet. Justement nous percevons parfois la *signification* de la forme représentée sans la forme représentée, et parfois nous percevons la forme sans en abstraire la *signification*. C'est pourquoi nous pouvons conserver plusieurs choses à la fois, mais nous ne pouvons pas les représenter. Et nous avons déjà dit que la faculté de la conservation et de la remémoration sont une par le sujet, deux par l'aspect, car ce que perçoit la faculté représentative de ce précis individu Zayd n'est que ce que en peint le peintre dans la conservation, et ce que perçoit la faculté de la remémoration n'est que la *signification* de cette peinture.[17]

L'événement du *maʿnâ* de la chose dans l'âme, de la "signification" de la chose, est un fait psychologique et physiologique: il advient au moment de la perception de la chose et il est étudié — tout comme l'événement des représentations — dans les écrits de psychologie car il appartient au domaine psychique. Si les êtres humains sont capables d'exprimer par la parole ce qu'ils ressentent, et qu'ils sont capables non seulement de 'dire les choses', mais de 'dire quelque chose' de ces mêmes choses, c'est parce que la trace des choses dans l'âme humaine n'est pas une simple représentation, mais aussi déjà un signe et une signification.

Puisque les êtres humains sont capables de saisir ces signes naturels des choses, ils peuvent en faire ensuite un usage conventionnel par la parole, s'exprimer, communiquer, évoluer dans un univers qui n'est pas seulement un univers psychique de représentations, mais un univers sémantique de significations.

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16 Pour une traduction différente de *maʿnâ* cf. Kwame Gyekye, "The Terms 'Prima Intentio' and 'Secunda Intentio' in Arabic Logic," *Speculum*, 46 (1971), pp. 32–38; Christian Knudsen, "Intentions and Impositions," in *The Cambridge History of Later Medieval Philosophy*, éd. Norman Kretzmann et al. (Cambridge: Cambridge University Press, 1982), pp. 479–95, et la discussion de Deborah Black in "Intentionality in Medieval Arabic Philosophy."

17 Averroès, *Talkhiṣ*, p. 40. Je traduis et je souligne.

Fusionner les valences sémantiques et psychiques du *ma'nâ* est susceptible d'ouvrir de nouvelles pistes de lecture. Dans cette contribution, nous avons voulu montrer que cette opération est légitime, car elle trouve un fondement textuel précis.

Cette opération n'est pas sans soulever un certain nombre de problèmes. Un, en particulier, mérite d'être mentionné. Lorsqu'on privilégie le sens sémantique de *ma'nâ*, et qu'on traduit ce terme par 'signification' (ce qui ne pourra que faire échos au "Sinn" frégéen), et qu'on fait l'expérience de la superposer avec sa valence psychologique (dont la traduction "intention" n'est qu'un calque du latin), une tension certaine et non résolue entre universel et particulier — l'universel du langage, le particulier de la connaissance sensible — s'amorce.[18] On pourrait s'attacher à résoudre cette tension: tel n'est pas le but de cet article. En revanche, nous conclurons en signalant que la difficulté liée à cette tension irrésolue et mise en lumière par notre lecture, confirme, il nous semble, toute la polyvalence du terme *ma'nâ*, véritable terme — relais entre science psychologique et sciences du langage. Une polyvalence qui représente bien un univers conceptuel où beaucoup de choses — toutes sans doute? — peuvent se dire de plusieurs manières.

4. Conclusion

Se souvenir d'une chose, c'est réactiver ce qu'on a appris de la chose. Pour les animaux, la mémoire est simple restitution de la trace psychique de la chose. Pour les êtres humains, il s'agit de retrouver aussi ce que la chose nous a dit au moment de la perception, et d'évoluer dans un domaine sémantique: seulement ainsi, on peut chercher un souvenir dans le stock de représentations qui sont conservées dans l'âme après la disparition des objets perçus. La mémoire humaine prend son point de départ dans la recherche du sens, de ce que la chose veut dire, de ce qu'une représentation dit de ce dont elle est la représentation.

Ainsi, les êtres humains sont seuls capables de mémoire volontaire, c'est-à-dire de réminiscence, car ils sont capables de chercher et retrouver la signification des choses: la signification qu'ils cherchent à réactiver n'est rendue possible que parce que, au moment même de la perception, ils ont eu la capacité de la saisir.

La mémoire humaine opère ainsi, non seulement dans le domaine psychique, mais aussi dans le domaine sémantique, et elle se pose, chez Averroès, comme une faculté de frontière, capable de faire le lien entre les connaissances sensibles et les contenus sémantiques propres au langage et à la pensée discursive. Elle permet aux êtres humains, sous l'influence de l'intellect, non seulement de percevoir le monde, mais de lire le livre du monde, et d'en parler.

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18 Cela a été déjà signalé par la critique. cf. Deborah Black, "Memory, Individuals, and the Past in Averroes' Psychology," *Medieval Philosophy and Theology*, 5 (1996), pp. 161–87.

JOËL CHANDELIER

Memory, Avicenna and the Western Medical Tradition

1. Introduction

In the field of Medieval Philosophy, and particularly in the study of the theory of the soul, Avicenna is well known for his division of the internal senses and for his presentation of their cerebral locations. In his *Shifā'*, Avicenna presents an original theory that explains the functioning of the soul.[1] For him, there are five internal senses. The first is the common sense (ar. *al-ḥiss al-mushtarak*); its role is to reunite forms and intentions given to it by the five external senses. The second is the imagination (*al-khayāl*), whose activity is to perceive and conserve forms. The third is the cogitative faculty (*al-fikr*), or the imaginative faculty in the case of animals (*takhayyul*), which is capable of composing and dividing forms. The fourth is the estimative faculty (*al-wahm*), which perceives non-sensible intentions (*ma'ānī*): the classic example of this is the lamb who, upon seeing the wolf, perceives danger and the necessity to flee. The fifth and last faculty is memory (*al-dhākira*, lat. *memoria*), whose role is to conserve these intentions once they are perceived by the estimative faculty. Avicenna also gives the locations of these five internal senses: the common sense and imagination are situated in the anterior ventricle of the brain, the cogitative and the estimative in the middle ventricle, and memory in the posterior ventricle.[2]

1 Avicenna, *Al-Shifā': Al-Nafs*, I.5, 43–45 in *Avicenna's 'De anima', Being the Psychological Part of Kitāb al-shifā',* ed. by Fazlur Rahman (Oxford: Oxford University Press, 1959).

2 On Avicenna's theory of internal senses, see Harry A. Wolfson, "The Internal Senses in Latin, Arabic and Hebrew Philosophical Texts," *The Harvard Theological Review*, 28 (1935), pp. 69–133; Gotthard Strohmaier, "Avicennas Lehre von den 'inneren Sinnen' und ihre Voraussetzungen bei Galen," in *Le opere psicologiche di Galeno*, ed. by Paola Manuli and Mario Vegetti (Naples: Bibliopolis, 1988), pp. 231–42; Deborah L. Black, "Estimation (*Wahm*) in Avicenna: The Logical and Psychological Dimensions,"

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Hence, according to Avicenna, the memorisation function is not situated in one part of the brain but in two different areas. The preservation of forms — that is to say, images — falls under imagination and is therefore situated in the anterior ventricle of the brain, while the preservation of intentions falls under memory, and is as such found in the posterior ventricle. If this distribution is undeniable when one follows the division of faculty established by Avicenna, it presents a question that is above all an anatomical problem: does this mean that the remembered forms and intentions are conserved in two different areas of the brain? In this respect, one point has often been missed by Avicenna's modern commentators: Avicenna was not only a philosopher, but also a physician; he produced not only philosophical works, but a body of important medical works as well. Many commentators find the medical part of his works of little philosophical interest and see it as only repeating his philosophical theory, maybe in a somewhat simpler way for less subtle minds — that is, for physicians. My first goal here is to show that this view is incorrect, and that reading Avicenna's medical writings can be very useful to test the coherence of Avicenna's medical and philosophical works. This is not trivial, for there were obvious contradictions between the teachings of Galen and Aristotle; Avicenna is among those who tried to confront these contradictions directly, with the goal of resolving them definitively. The case of memory is therefore a very good example for understanding Avicenna's views regarding the relationship between these two disciplines.[3] The other goal of this research is to understand whether the specifically medical aspects of memory influenced the philosophical thought of Avicenna and his successors, or whether, on the contrary, each of these traditions had its own, largely independent logic. The study will not be limited solely to Avicenna, but will also try to shed some light on the posterity this author had not solely among philosophers (which is already well known), but also among physicians on the precise topic of memory, limiting ourselves to the Latin world. As such, we will see whether his influence on this subject was as important in medicine as it was in philosophy.

Dialogue, 32 (1993), pp. 219–58; Deborah L. Black, "Estimation and Imagination: Western Divergences from an Arabic Paradigm," *Topoi*, 19 (2000), pp. 59–75; Carla Di Martino, *Ratio particularis: La doctrine des sens internes d'Avicenne à Thomas d'Aquin* (Paris: Vrin, 2002); Carla Di Martino, "Memory and Recollection in Ibn Sînâ's and Ibn Rushd's Philosophical Texts Translated into Latin in the Twelfth and Thirteenth Centuries: A Perspective on the Doctrine of the Internal Senses in Arabic Psychological Science," in *Forming the Mind. Essays on the Internal Senses and the Mind/Body Problem from Avicenna to the Medical Enlightenment*, ed. by Henrik Lagerlund (Dordrecht: Springer, 2007), pp. 17–26; and, for the Latin philosophical tradition in the thirteenth century, Dag Nikolaus Hasse, *Avicenna's 'De Anima' in the Latin West. The Formation of a Peripatetic Philosophy of the Soul 1160–1300* (London – Turin: The Warburg Institute – Nino Aragno Editore, 2000). For a comparison with Averroes, see Deborah L. Black, "Memory, Individuals, and the Past in Averroes's Psychology," *Medieval Philosophy and Theology*, 5 (1996), pp. 161–88.

3 On Avicenna and medicine, see Peter E. Pormann, "Avicenna on Medical Practice, Epistemology, and the Physiology of the Inner Senses," in *Interpreting Avicenna. Critical Essays*, ed. by Peter Adamson (Cambridge: Cambridge University Press, 2013), pp. 91–108.

2. Memory in Avicenna's Medical Works

Avicenna's most well-known medical work is of course *The Canon of Medicine*. It is an immense encyclopaedia covering the discipline in its entirety, including both its theoretical aspects and its practical ones. But Avicenna wrote other texts on medicine. One of them, less known but no less interesting, is the *Poem on Medicine*.[4] It is an introductory text, written in verse as its name implies. Its ambition is more limited than that of the *Canon*, since it is meant to introduce young physicians to the basic elements of their field. In this text, Avicenna is very concise about internal senses and memory. He says:

> There are nine properties in the soul. Five of them are related: hearing, sight, smell, taste, and touch in its entirety. One goes to the nerves; through it man moves his joints. Another represents objects as seen in a mirror; another governs thought; the last, memory.[5]

In this passage, Avicenna does not mention five internal faculties, as he does in the *Shifā'*, but only three, to which he adds the faculty of movement. We can give two explanations for this choice. The first is that the *Poem on Medicine* conforms — and here is one way in which it differs from *The Canon* — to classical medical teachings. These teachings are typically referred to as 'late' or 'Alexandrian' Galenism, meaning the re-elaboration and systematisation of the medical theory of Galen in Alexandria around the sixth and seventh centuries CE. We know that it is this medical theory that the Arabs received and translated.[6] Avicenna is therefore not proposing a personal theory here, but a summary of theories then accepted by physicians. Moreover, he is doing this despite their possible contradictions with his philosophical teachings. The second element to take into account is that this division into three internal senses comes precisely from Galen, for Galen distinguishes, in *The Differences of Symptoms*, three faculties that he calls "hegemonic": imagination, reason, and memory:[7] these

4 Avicenna, *Poem on medicine*, in *Avicenna Cantica. Texto árabe, versión latina y traducción española* transl. and ed. by J. Coullaut Cordero, E. Fernández Vallina and M. C. Vázquez de Benito (Salamanca: Ediciones Universidad Salamanca, 2010). English translation in Avicenna, *Poem on medicine*, ed. and transl. by H. C. Krueger (Springfield: Thomas, 1963).

5 Avicenna, *Poem on Medicine*, I., pp. 121–25.

6 For a synthesis on the beginnings of Arabic medicine, see Peter E. Pormann and Emilie Savage-Smith, *Medieval Islamic Medicine* (Edinburgh: Edinburgh University Press, 2007), pp. 6–40. On Alexandrian Galenism, see Nicoletta Palmieri, "La médecine alexandrine et son rayonnement occidental (VI^{e}–VII^{e} s. ap. J.-Ch.)," *Lettre d'informations. Médecine antique et médiévale*, 1 (2002), pp. 5–23.

7 Galen, *On the Differences of Symptoms*, in *Claudii Galeni Opera Omnia* vol. VII, ed. by Carl G. Kühn (Leipzig, 1821), pp. 42–84 (p. 56). Cf. Rudolf E. Siegel, *Galen on Psychology, Psychopathology, and Function and Diseases of the Nervous System. An Analysis of his Doctrines, Observations and Experiments* (Basel – München –Paris – London – New York – Sydney: S. Karger AG, 1973), pp. 141–42. On Avicenna's interpretation of Galen, see Danielle Jacquart, "Avicenne et la nosologie galénique: l'exemple des maladies du cerveau," in *Perspectives arabes et médiévales sur la tradition scientifique et philosophique grecque*, ed. by Ahmad Hasnawi, Abdelali Elamrani-Jamal, and Maroun Aouad (Paris-Leuven: Peeters-Imap, 1997), pp. 217–26.

are the three faculties that we find in Avicenna's *Poem on Medicine*. We can also find them in many other Arabic medical texts, such as the *Kitāb al-masā'il fī l-ṭibb* by Ḥunayn Ibn Isḥāq (*c.* 808–77), where he says: 'the intellective forces are three: the one that serves imagination, the one that serves thinking, and the one that serves memory'.[8] Thus, in his *Poem* Avicenna simply follows the Galenic medical theory without discussing it, even if it contradicts his own philosophical theory.

Nevertheless, one may suspect that a superior mind such as Avicenna's could not have neglected the incompatibility between these two systems. He directly confronts this incompatibility in his *Canon*. The first book (from a total of five) of this encyclopaedia addresses the general principles of medicine. Avicenna notably explains the "forces" or faculties of the soul. Here, in conformity with the theory formulated in the *Shifā'*, he lists the five internal senses. However, Avicenna cannot limit himself to these. Here is what he says of the two that are of interest to us:

> The internal faculty, that is animal, corresponds to five types of faculties. One is the faculty that we call common sense and imagination. This, for physicians, is a single faculty, while, for those who understand it philosophically, there are two. Common sense is that which receives all the sensibles and is impressed by its forms, which come together inside it; the imagination is that which conserves them after their collection and retains them after their disappearance from sense; but the search for truth in this subject belongs to the philosopher. Whatever it may be, their localisation and the principle that governs them is the anterior cavity of the brain (…) The third that physicians mention, the fifth or the fourth in reality, is the faculty of conservation and memory, and it is the treasury of intentions that reach the estimative from the sensibles outside of their sensible forms, and its location is the back cavity of the brain.[9]

Here, Avicenna presents his doctrine in a very interesting way: he clearly describes the five internal senses, as in the *Shifā'*, but he also explains that physicians only use three of them, namely imagination, reason, and memory, and that imagination, reason, and memory are located in the front, in the middle and in the back of the brain respectively. According to him, philosophical discourse is necessarily "more true;" but medical discourse is equally legitimate, because, although false in its foundations, it is adapted to the objective of medicine, namely treatment. Just after that, Avicenna explicitly discusses memory and the division between memory and recollection:

> It is not what the physician focuses on, because the same illnesses affect each of these two faculties [that is, memory and reminiscence], and they are illnesses that reach the posterior ventricle of the brain, either in its constitution or its composition.[10]

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8 Ḥunayn ibn Isḥaq, *Al-Masā'il fī l-ṭibb*, vol. I, ed. by 'Alī Abū Rayyān, 'Arab Mursi Muḥammad and Galāl Muḥammad Mūsā (Cairo: Dār al-Jāmi'āt al-Miṣriyyāt, 1978), p. 14.

9 Avicenna, *Al-Qānūn fī l-ṭibb*, 3 vols, (Cairo: Būlāq, 1877) I, 1.6.5., vol. I, pp. 71–72.

10 Avicenna, *Al-Qānūn fī l-ṭibb*, p. 72.

For the physician, the distinction between memory and reminiscence is therefore useless: the treatment he must use is always the same. Here we can find an example of Avicenna's general attitude towards the question of the relationship between medicine and philosophy, which has been called instrumentalism. Avicenna's instrumentalism is the idea that medicine produces tools that allow the physician to be able to act on phenomena, but not to attain truth. Medicine is therefore legitimate only in its field, but legitimate all the same.[11]

So far we have remained at a theoretical level. But medicine is not just theoretical, as it deals above all with the dysfunctions of living beings. The brain, which contains the faculty of memory, can obviously be afflicted with disease; and these diseases are dealt with in the third book of the *Canon*, which presents the illnesses that afflict everything from head to toe. In the first part, Avicenna presents the diseases of the brain. Of course, some of them affect memory, just as they may affect other functions of the brain. Avicenna addresses these diseases by presenting them in a chapter entitled "on the signs from the operations of the internal senses." About memory, he says:

> Among these signs is damage to the faculty of memory, whether it be weakened or destroyed, as reported by Galen regarding an epidemic that occurred in the area surrounding Ethiopia, where it came about because of numerous cadavers after a violent battle; afterwards, the epidemic spread to the land of the Greeks where its effects on its victims included an amnesia such that those afflicted could not remember their own names or those of their children.[12] And the most notable of what occurs in terms of the weakening of memory arises from damage to the back of the brain by cold, humidity or aridity, or because of a disorder; one who is ill might also have memories of something that he never experienced.[13]

It seems that, according to Avicenna, a physical disorder located in the back of the brain provokes the weakening or even the total destruction of memory, which can take several forms (amnesia, false memories, etc.). This, of course, conforms to the medical theory of memory and its localisation put forth in the first book of the *Canon*. However, in this passage, we find no mention of possible damage to the imagination that could lead to problems with memory, and memory seems almost entirely restricted to the back of the brain. This seems contradictory to Avicenna's philosophical vision as set forth in the first book. His assertions are therefore, at best, incomplete, as commentators on the text did not fail to notice.

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11 Cf. Michael R. McVaugh, "Introduction," in *Arnaldi de Villanova Opera Medica Omnia*, vol. V, I: *Tractatus de intentione medicorum*, ed. by Michael R. McVaugh (Granada – Barcelona: Universidad de Barcelona, 2000), pp. 127–97 (pp. 145–54). On the philosophical and medical background of Avicenna's ideas on internal senses, see Pormann, "Avicenna on Medical Practice," pp. 102–07.

12 Galen, *On the Differences of Symptoms* 3, pp. 61–62.

13 Avicenna, *Al-Qānūn fī l-ṭibb*, III, 1.1.6, vol. II, p. 9.

3. The Western Medical Tradition on Memory

The *Canon* has had enormous success in the Western world. It was translated at the end of the twelfth century by Gerard of Cremona in Toledo and became, starting at the end of the thirteenth century and until the seventeenth century, the primary teaching reference used in universities.[14] For this reason, hundreds of commentaries were written on this text in Latin. It is not, of course, possible to address them all, so I will aim to present some of them in order to show the debates among the medical community surrounding the question of memory at the end of the Middle Ages. Looking at some commentaries on the aforementioned passages from the *Canon*, it is possible to identify four topics of interest: first, the question of the number of faculties according to physicians; second, the question of their location; third, the types of memory damage; fourth and finally, the difference between damage to imagination and damage to memory.

The first topic is, in the Avicennian tradition, based mostly on the passage from the first book of the *Canon* in which Avicenna presents the doctrine of the internal senses according to philosophers and according to physicians. One of the first commentaries written on this text was produced by Antonio da Parma around 1300.[15] Antonio da Parma was a physician and philosopher who was active in Italy in the first quarter of the fourteenth century.[16] The major part of his commentary on this passage of the *Canon* is comprised of scholastic questions. The longest, for example, deals with the beginning of the part of the *Canon* that we have already seen: 'Are imagination and common sense one or two different faculties?'[17] Regarding memory, Antonio asks only two short scholastic questions: "Is there a faculty, that preserves non-sensible species, which is called memorative?" and "Does there exist a memory of intelligibles *per se*?" — which is to say, can we preserve reasoning just as we can preserve images (in the imagination) and intentions (in memory)?[18]

Antonio da Parma addresses the first question with a response that is more philosophical than medical. His response is also rather original, since he openly opposes Avicenna. For him, it is effectively false to say that sensible and non-sensible species are preserved in different locations, as Avicenna affirms, and as do Thomas Aquinas and Albert the Great after him. Relying on Aristotle's authority, he asserts: "We argue the contrary by Aristotle's authority in *De memoria et reminiscentia*, namely

14 Cf. Joël Chandelier, *Avicenne et la médecine en Italie. Le 'Canon' dans les universités (1200–1350)* (Paris: Honoré Champion, 2017).

15 Antonio da Parma's commentary can be found in two manuscripts: Rome, Biblioteca Apostolica Vaticana Vat. lat. 4452, f. 1ra-47vb and Munich, Bayerische Staatsbibliothek CLM 13020, f. 226ra–267rb. I will refer to the latter.

16 On Antonio Pelacani da Parma, see Dragos Calma, "Pelacani, Antonio," in *Dizionario biografico degli Italiani*, vol. LXXXII (Rome: Istituto della Enciclopedia Italiana, 2015) pp. 92–95.

17 "Utrum fantasia et sensus communis sint una virtus vel due differentes" (BSB CLM 13020, f. 264va).

18 "Utrum sit aliqua virtus que conservet per se species non sensatas, que dicta est memorativa" and "Utrum intelligibilium sit memoria per se" (BSB CLM 13020, f. 266ra).

that there is no faculty that alone preserves non-sensible species."[19] For Antonio da Parma, a single faculty — which he does not directly name, but which we can call memory — preserves intentions and sensible images. We could think that his criticism of Avicenna is based on Galen, but in fact Galen is never mentioned and Antonio relies almost exclusively on Aristotle.[20] He concludes as follows: "I say that there is no faculty that preserves non-sensible species *per se*, but that the one that preserves sensible species also preserves non-sensible species by accident."[21] The whole of this passage is in reality far removed from strictly medical questions, as is the question that follows. That question asks "whether there is a memory *per se* of intelligibles." Following Aristotle, who is once again the only mentioned authority (he quotes from *On the Soul*, the *Nicomachean Ethics* and *On Memory and Reminiscence*), and probably Averroes, Antonio explains that there is no memory *per se* of intelligibiles, giving two *rationes* without using medical arguments.[22] Philosophical debates clearly did find their way into medical texts, particularly when the authors had a dual training, as Antonio da Parma did. However, physicians had some difficulty separating the preservation of sensibles and the preservation of intentions in the way that Avicenna did. This led to a certain embarrassment that sometimes hid behind the "physician's position" and sometimes (in the case of Antonio da Parma) directly confronted the philosophical question.

But physicians faced a second question, one that was more obviously concrete and useful for them: the question of the location of memory. Contrary to general belief, the theory of the location of various faculties in various parts of the brain does not come from Galen, as Julius Rocca has shown, but rather from some of

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19 BSB CLM 13020, f. 266ra: "Sed hic est dubitatio utrum sit aliqua virtus que conservet per se species non sensatas que dicta est memorativa, et videtur quod sic auctoritate Avicenne hic et idem ponit Thomas et Albertus. Hoc etiam arguitur ratione. (…). In contrarium arguitur auctoritate Aristotelis in *De memoria et reminiscentia* scilicet quod non sit virtus aliqua que sit per se conservativa specierum non sensibilium, sed illa eadem que est conservativa specierum sensibilium per se est conservativa specierum non sensibilium per accidens." On the notion of species, see Leen Spruit, *Species Intelligibilis. From Perception to Knowledge*, 2 vols (Leiden – New York –Köln: Brill, 1994–5).

20 BSB CLM 13020, f. 266ra: "Dicit enim sic ibi Aristotelis quod memoria per se est sensibilium et per accidens intelligibilium. Tunc arguo sic: si eodem loco cum conservatione sensibilium fit conservatio intelligibilium, in eodem loco cum conservatione sensibilum fit conservatio non sensibilium". Antonio da Parma is referring to Aristotle, *On memory and reminiscence*, 450a11–14: "But memory, even of the objects of thought, implies a mental picture. Hence it would seem to belong incidentally to the thinking faculty, but essentially to the primary sense faculty" (transl. by Walter S. Hett).

21 BSB CLM 13020, f. 266ra: "Ad questionem illam ego dico quod non est aliqua virtus que sit conservativa specierum non sensatarum per se, sed illa eadem que est conservativa specierum sensatarum per se est conservativa specierum non sensatarum per accidens, et ideo huius est conservatio rei requiritur cognitionem rei, quoniam aliquis accipit cognitionem de re ut eam cognoscat cum vult, hoc autem non potest fieri nisi eam conservet sed primum sensitivum est per se cognoscens sensibilia et per accidens non sensibilia, ergo erit per se conservans sensibilia et per accidens non sensibilia."

22 BSB CLM 13020, f. 266ra: "Dico quod non est aliqua virtus conservativa intelligibilium per se, sed illa que est conservativa sensibilium per se est conservativa intelligibilium per accidens, et ratio huius est duplex (…)."

his successors, near the end of Antiquity.[23] In any case, for Antonio da Parma, as for all medieval physicians, it was a discovery made by the *medici*: "[Aristotle] did not establish locations for the various faculties in the brain because he had no tangible evidence (*signa sensata*) for that; but the physicians found them."[24] Jacques Despars, a Parisian physician who died in 1458 and who commented on large parts of Avicenna's *Canon*, rightly raises questions on this topic, asking 'Is the memorative faculty in the posterior ventricle of the brain?'[25] He distinguishes three options: the first is a so-called Aristotelian point of view, according to which memory is primarily in the heart, secondarily in the brain, and particularly in the front of the brain. The second position is presented as that of physicians, Avicenna, and Averroes; according to this view, memory is in the posterior part of the brain. Lastly, a third opinion (which Despars does not attribute to anyone in particular) asserts that all of the internal senses are in the brain, each with a simple tendency or preference towards a location (imagination more towards the front, memory towards the back, etc.).

It is unsurprising that Jacques Despars, like Avicenna, aligns himself with the second opinion. But what is interesting here is his argumentation, which is above all medical and anatomical. In favour of the localisation in the posterior part of the brain, he notes that 'when memory is damaged, as during [the disease called] lethargy, venerable physicians recommend applying local remedies to the occiput, and we can see from experience that it is useful'. However, to defend the idea that the faculties are localised in the entirety of the brain, Jacques Despars highlights that some people have already seen "a person living and remembering after the removal of the whole posterior part of the brain."[26] For him, choosing between these two opinions depends on concrete considerations: "Choose the second opinion, and you

23 Cf. Julius Rocca, *Galen on the Brain. Anatomical Knowledge and Physiological Speculation in the Second Century A.D.* (Leiden – Boston: Brill, 2003), pp. 245–47.

24 BSB CLM 13020, f. 266rb: "Ipse non distinxit loca secundum cerebrum in quibus virtutes consistant quoniam ad hoc non habuit signa sensata; sed illa invenerunt medici."

25 Jacques Despars, comm. *Canon* I, 1.6.5. (Lyon: 1498), s. x6^{r}-^{v}: "Queritur secundo utrum memorativa virtus sit in ventriculo posteriori cerebri." On Jacques Despars, see Danielle Jacquart, "Le regard d'un médecin sur son temps: Jacques Despars (1380?-1458)," *Bibliothèque de l'École des Chartes*, 138 (1980), pp. 35–86.

26 Jacques Despars, comm. *Canon* I, 1.6.5., s. x6r-v: "Super hac materia sunt tres opiniones. Prima est Aristotelis quod memorativa virtus est originaliter in corde sicut et communis sensus, sed manifestive et secundario est in illa parte cerebri in qua est sensus communis, videlicet in anteriori ventriculo, quia cum fit eadem realiter cum sensu communi, non est ab eo localiter distincta. Secunda est Galeni et medicorum, Avicenne et Averroys quod memorativa virtus est in ultimo ventriculo cerebri. Nam lesa parte illa vehementi frigore vel vulnere penetranti leditur memoria. Item lesa memoria sicut in lethargia iubent medici solemnes applicare remedia localia super occipitium et illic inveniuntur experimento conferre. Tertia opinio est quod omnes anime virtutes apprehensive occulte sunt in toto cerebro et in omnibus ventriculis eius, sed sensus communis et fantasia magis vigent in anteriori ventriculo, cogitativa, imaginativa et estimativa in medio, memorialis et reminiscibilis in postremo. Et ad probationem huius adducunt testimonium quod quidam vixit memorans post abscisionem totius ultime partis posterioris cerebri. (…)."

will operate more safely in the preservation of health and the treatment of diseases involving the operations of these faculties."[27]

Gentile da Foligno, an Italian commentator on the *Canon* who died in 1348 during the Black Death,[28] raises the same question in his explanation of the third book of the text, commenting on the passage of the chapter on the corruption of memory in which Avicenna asserts that memory is situated in the posterior ventricle of the brain:

> [The corruption of memory] is similar to stupidity (lat. *stoliditas*, ar. *ru'ūna*), except that it occurs in the posterior part of the brain, because a reduction of certain operations, or a destruction of all operations, occurs in the posterior part of the brain.[29]

Gentile de Foligno puts forth the following *dubium*: "Are the operations described [in this chapter] the operations of the posterior part of the brain?"[30] His response allows him to distinguish four operations in the posterior part of the brain, essentially guided by the '*spiritus*', the material spirit supporting the faculties of the soul: 1) the movement of the *spiritus* that imprints information into memory; 2) the imprint itself; 3) the movement of the *spiritus* towards the middle of the brain to bring the species to the cogitative faculty; 4) the recognition of the species itself, which, although formally dependant on the cogitative faculty, is carried out in the posterior part of the brain and is called "the ultimate act of memory" because it must find the right species and thus recognise it.[31] Gentile da Foligno concludes that if one of the first three activities is deficient the fourth will necessarily be so as well. For the physician, the distribution and the clear separation of the internal senses is therefore not contrary to the analysis of their concrete functioning. Indeed, by requiring the intervention of the *spiritus* as a vehicle of species between the different parts of the brain, Gentile da Foligno is obliged to involve distinct faculties in several of its cavities.

If we examine in detail the types of damage to memory, we see that this adaptation of philosophical theory goes even further. An excellent example can be found in the case of what doctors call "lethargy." This disease is an alteration of memory that consists of its complete removal, which provokes a state of total stupor in which one

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27 Jacques Despars, comm. *Canon* I, 1.6.5., s. x6r-v: "Secunde opinioni adhere et tutius operabis in conservatione sanitatis et curatione egritudinum contingentium circa operationes earum."

28 On Gentile da Foligno, see L. Ceccarelli, "Gentile da Foligno," in *Dizionario biografico degli Italiani*, vol. LII (Rome: Istituto della Enciclopedia Italiana, 1999), pp. 162–67, and Chandelier, *Avicenne et la médecine*, pp. 190–213.

29 Avicenna, *Al-Qānūn fī l-ṭibb*, III, 1.4.12, vol. II, 62.

30 Gentile da Foligno, comm. *Canon* III, 1.4.12 (Venice: 1520-1522), f. 81va: "Dubitatur que sunt iste operationes posteriores cerebri."

31 Gentile da Foligno, comm. *Canon* III, 1.4.12, f. 81va: "Dicendum quod in posteriori parte cerebri consideramus quatuor operationes. Prima est motus spiritus in ventriculo ut fiat impressio qui motus saltem aliquando concurrit, vel saltem dispositio spiritus que est active impressio. Secunda est ipsa impressio qui est sigillatio passiva. Tertia est motus spiritus a posteriori ad medium, ut reducat speciem ad cogitativam. Quarta operatio est ipsa recognitio speciei, et hic est ultimus actus memorie, quia licet formaliter sic cogitative tribuitur, tamen ventriculo posteriori improprie et ut termino a quo. Quicunque igitur actus de tribus actibus deficit oportet quod deficiat quartus actus scilicet recognitio et hoc respectu eiusdem recognoscibilis."

forgets even to urinate or to close the mouth when it has been opened. It is brought about by a cold tumour in the brain. Avicenna says that the tumour is "in the channels in the interior of the brain."[32] However, Avicenna asserts that according to certain physicians any cold tumour in the brain can be called lethargy. Gentile da Foligno thus asks: "How can it be that forgetfulness occurs when there is a tumour in the anterior or median part of the brain?" His response in unequivocal: "It should be said that it can occur by way of sympathy (*per viam communitatis*). Moreover, according to Avicenna, there is, in the anterior part, a certain conservative faculty."[33]

In the case of the corruption of memory, a less serious condition that merely involves a reduction of the memory faculty, we can find this type of adaptation of the philosophical theory. Gentile da Foligno indicates that this disease is

> similar to stupidity and to the silliness of infants, for when man does not retain the forms of things and cannot summon them back, he thus does not have enough of them to exercise his cogitative discursive act (*actum discursivum cogitativum*); therefore, when presented with things, he judges them in the moment and does not persist in his judgment, because the species are not imprinted or are not retained, and this is the disposition of infants.[34]

This gives Gentile da Foligno the opportunity to propose an interesting description of children's memory:

> Infants or children do not reflect on preserved species in memory, because they do not retain them well and do not have many memorised things, and because they have little practice with it; when they are presented with something, they offer an immediate judgment, but the thing and the judgment are effaced from their mind soon after. And this is why they say one thing in one moment, and another in the next, they cry and no sooner begin to laugh, they follow a chicken, or a goose; and this is what Avicenna proves when he says 'because there is a reduction', a reduction or removal in the operation of memory. So the cogitative is damaged because there aren't enough images and judgments, except for images that are presented by accident on the outside, and for this reason [the afflicted person] has a disposition similar to that of an infant.[35]

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32 Avicenna, *Al-Qānūn fī l-ṭibb*, III, 1.3.7, vol. II, 51.

33 Gentile da Foligno, comm. *Canon* III, 1.3.7, f. 67rb: "Sed tu diceres: quomodo ad apostema partis anterioris cerebri et medie potest sequi oblivio? Dicendum quod hoc est per viam communitatis. Etiam secundum Avicennam in parte anteriori est aliqua virtus conservativa."

34 Gentile da Foligno, comm. *Canon* III, 1.4.12, f. 81rb-va: "Secundo est considerandum quod nocumenta memorie, scilicet quod est diminutio vel ablatio *est compar* idest similis *stoliditati* et fatuitati infantium, quia quando homo non retinet formas rerum et non potest eas reducere, tunc non habet copiam eorum cum quibus possit exercere actum discursivum cogitative; et ideo sicut contingit ab extra ei representari, ita iudicat nec persistit in iudicio, quia species non imprimuntur vel non retinentur, et ideo talis est dispositio infantilis."

35 Gentile da Foligno, comm. *Canon* III, 1.4.12, f. 81rb-va: "Infantes enim sive pueri non ratiocinantur de speciebus in memoria reservatis, quia non sunt bene retinentes et non habent copiam memorabilium cum etiam parum sint exercitati, sed sicut res ab extra presentatur, ita pro tunc de eis iudicant, et statim

After this comparison between the reasoning capacities of infants and patients affected by a corruption of memory, Gentile da Foligno specifies that in the latter the cause is damage to the posterior part of the brain. However, if this damage affects the cogitative, it is because it cannot manage to retrieve the species stored in memory. This observation leads Gentile da Foligno to explain that there are two ways of conceiving the memorative faculty:

> Let us say that 'memorative faculty' signifies two things. First, the non-cognitive conservative faculty, this one being more material because it is essentially achieved by a corporal disposition, namely a proportionate dryness. Second, the recognitive faculty (*virtus recognoscitiva*), this one more immaterial than the pure cogitative, and it is in our opinion the cogitative faculty that recognises again, although it is called memorative.[36]

Here, we find the distinction between memory and recollection, but presented in an original manner; because Gentile da Foligno clearly links recollection to cogitation, according to him the recognitive faculty is a part of the cogitative and one cannot function without the other.

4. Memory and Imagination

But there is one last topic to consider: the distinction between two diseases that manifest themselves through amnesia, namely damage to the imagination and damage to memory. Such a distinction can be deduced from Avicenna's (and other authors') separation of memory into two faculties of preservation, one for sensible forms, the other for intentions. As such, there should be two different diseases, one which results from damage to the imagination, in which one no longer recalls images, the other from damage to memory, in which one no longer recalls intentions. Avicenna is, naturally, consistent with himself in his *Canon*. Right after presenting the corruption of memory in book 3, he introduces a chapter on the corruption of imagination. In it, he states:

> You can recognise it from the signs listed in the other chapters, except that it takes place in the anterior part of the brain, and its corruption means that one imagines things that do not exist [and so it is due to a bad constitution] (…); or

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aboletur ab eis res et iudicium. Et ideo modo dicunt de uno, modo de alio, et ideo nunc plorant, nunc statim rident, et sequuntur gallum sive aucam. Et hoc est quod Avicenna probat cum dixit *quoniam est diminutio*, quod dicit in diminutione facta vel ablatione in operatione memorie, tunc leditur cogitativa cum non sit copia specierum et iudiciorum nisi solum specierum ab extra contingenter occurentium, et ideo hic tunc habet dispositionem similem infantile."

36 Gentile da Foligno, comm. *Canon* III, 1.4.12, f. 81rb-va: "Dicendum quod virtus memorativa duo dicit. Primo virtutem conservativam non cognitivam et ista est materialior, quia perficitur multum dispositione corporali, scilicet sicco proportionato. Secundo dicit virtutem recognoscitivam, et ista est immaterialior quam pura cogitativa, et est secundum nostram opinionem virtus cogitativa que iterum recognoscit, licet vocetur memorativa."

> rather imagination is reduced and [the patient] has difficulty imagining things, has no visions, few dreams — or forgets them — , and forgets what sensible forms are like and cannot imagine them. And so the cause is the same as for the reduction of memory.[37]

Avicenna also offers a medical explanation of the distinction: the corruption of memory is caused above all by the cold and humidity, whereas corruption of imagination is caused more often by dryness.

Gentile da Foligno endeavours to explain this text by affirming that the anterior and posterior parts of the brain have different constitutions. As a result, the diseases that affect them have different causes. But, above all, he comments on an enigmatic remark of Avicenna. The Arabic text is clear. It reads: "Corruption of memory occurs on the intentions of the sensibles (*fī maʿānī al-maḥsūsāt*) and because of their composition; corruption of imagination occurs on the images of the sensibles (*fī muṯul al-maḥsūsāt*) and their form. And this is known in another art."[38] However, the Latin translation is less obvious: "*Corruptio quidem memorie cadit in duabus dictionibus sensatorum et in corruptione compositionis eorum, et corruptio imaginationis cadit sicut in sensatis et formis ipsorum.*"[39] Here, Gerard of Cremona, the *Canon*'s translator, has curiously translated "*maʿānī*" with "*duabus dictionibus*"[40] and not "*intentionibus*," which allows Gentile da Foligno to comment:

> In fact, Avicenna means that damage to memory can affect *two* modes of the *sensibles*, that is images and intentions, because it preserves both, and thus damage can occur in their composition and in their division; but damage of the imagination only happens to one type of sensibles, namely images, and not intentions, and for this reason he says "in the sensibles and their forms," that is, sensibles that are forms or images. And according to this text, we understand what Avicenna is thinking, namely that memory is the repository not only of intentions but also of images, even though images are [preserved here] because of intentions.[41]

This assertion is not simply a passing remark, for Gentile da Foligno comes back to it in another part of his commentary on the third book, while commenting on a passage in which Avicenna explains that a tumour in the anterior part of the brain

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37 Avicenna, *Al-Qānūn fī l-ṭibb*, III, 1.4.14, vol. II, 63.

38 Avicenna, *Al-Qānūn fī l-ṭibb*, III, 1.4.14, vol. II, 63. Evidently, for Avicenna the distinction between intentions and images belongs to philosophy.

39 We follow here the Latin version published in Venice in 1490.

40 The 'duabus' is probably here the consequence of an erroneous reading by Gerard of Cremona, who translated it as a dual (*maʿnayay*) and not as a plural (*maʿānī*), two forms whose writing is very similar. As such, it allowed Gentile da Foligno to explain those words by "images and intentions."

41 Gentile da Foligno, comm. *Canon* III, 1.4.15, f. 83ra: "Vult igitur Avicenna dicere quod nocumentum memorie est *in duobus* modis *sensatorum*, scilicet idolorum et intentionum, quia utraque sensata conservat, et ideo fit nocumentum in eorum compositione et etiam divisione. Sed nocumentum imaginationis fit in uno genere sensatorum, scilicet idolorum et non intentionum, et ideo dixit *in sensatis et formis* idest sensatis que sunt forme sive idola. Et ex hac littera comprehenditur mens Avicenne, scilicet quod memoria est thesaurus non solum intentionum sed etiam idolorum, licet sit idolorum propter intentiones."

affects imagination, a tumour in the middle part affects reason, and a tumour in the posterior part affects memory.[42] Avicenna affirms that in this last case the patient "forgets what he is looking for" (*'nasiya mā yarāhu'*), giving the example of someone asking for something and then forgetting what he asked for; but here the Latin text is translated as "he forgets what he has seen" (*'obliviscitur eius quod videtur'*),[43] which is a fair literal translation, but which subtly modifies the larger sense, since it emphasises vision (and thus sensible images), and not thought (and therefore intentions). Gentile da Foligno, who does not know Arabic and therefore has only access to the Latin text, does not fail to bring up this point, and asserts: "*Obliviscitur eius quod videt*. Notice here that Avicenna never thought that the faculty that is in the posterior part only preserves intentions; on the contrary, it preserves sensible species' as well."[44]

In both cases, Gentile da Foligno takes advantage of the ambiguity of the Latin text to modify Avicenna's theory in a direction completely contrary to the mind of its author. For him, memory preserves not only intentions but also sensible images that are necessarily linked to them; imagination only holds these images for a short moment, simply allowing the cogitative and estimative faculties the time to divide and analyse them. In a way, imagination is a type of short-term memory.[45] Jacopo da Forlì, an Italian physician who commented on *The Canon* a half-century later, will share the same opinion. Whereas Avicenna, in the first book of the *Canon*, clearly separates preservation of images and preservation of intentions, Jacopo da Forli affirms:

> It is not Avicenna's intention to preserve species of non-sensible things in the memorative; for, the species of sensible things is also preserved there. Indeed, in the memorative are preserved all species comprehended by the cogitative or the estimative; however, the estimative apprehends not only those from non-sensibles, but also from sensibles, if we consider that all that an inferior faculty seizes, a superior faculty can seize as well.[46]

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42 Cf. Avicenna, *Al-Qānūn fī l-ṭibb* III, 1.3.2, vol. II, 46. On this topic, see Jacquart, "Avicenne et la nosologie galénique."

43 Or "he forgets what he sees" (*'obliviscitur eius quod videt'*), according to some manuscripts.

44 Gentile da Foligno, comm. *Canon* III, 1.3.2, f. 59rb-va: "*Et cum cadit* scilicet frenesis vel sirsen *in eo quod est coram posteriore* scilicet parte cerebri, ubi est virtus memorativa, *obliviscitur eius quod videt*. Et hic nota quod numquam fuit mens Avicenne quod virtus que est in parte posteriori conservet intentiones solas, immo etiam cum hoc species sensatas."

45 That is exactly what Jacques Despars thinks too: "Retentio vero dictarum formarum ab imaginativa non est necessaria neque tam fixe neque tanto tempore sicut in memoria, sed solum quousque cogitativa in his operata fuerit et ab his extraxerit estimativa species insensatas amicitie vel inimicitie, et in memoria reposuerit" (Jacques Despars, comm. *Canon* III, 1.4.14, s. l. 3v).

46 Jacopo da Forlì, comm. *Canon* I, 1.6.5. (Venice: 1479), s. 11r: "Non enim esse intentionem Avicenne in memorativa solum reservatur species insensatorum sed etiam sensatorum; reservatur enim in memorativa quelibet species comprehense per cogitativam et extimativam, sed per extimativam non solum insensata sed etiam sensata dicens quicquid apprehendit virtus inferior apprehendit superior."

The reason for this infidelity to the text of Avicenna is most likely found in the desire for more flexibility in the physical analysis of the phenomenon of memory: for this was, we suspect, necessary to meet therapeutic needs.

Avicenna's division of memory into two parts did not therefore entirely convince physicians. They often preferred a simpler conception, more Galenic on the whole, because, given their concrete medical experience with patients, they found it difficult to separate what could fall under memory of sensible things (in the imagination) from the memory of intentions (memory *stricto sensu*). In the diseases that affect these activities, despite what Avicenna had said, it was nearly impossible to make such a clear distinction. Certainly, this distinction could sometimes coincide with the distinction between short-term and long-term memory, as Gentile da Foligno's analysis suggested. But even here the connection was not perfect: a long-term memory of sensible imprints or a short-term memory of intentions was always possible.

Furthermore, physicians had at their disposal a much more coherent — and, from their perspective, more plausible — theory to explain memory disorders, a theory that linked these disorders to the constitution of the brain; indeed, physicians noted that if the brain has a dry constitution this leads to a defect in short-term memory without affecting long-term memory. Bernard de Gordon, a physician from Montpellier in the early fourteenth century, clearly explains this idea:

> If the cause [of corruption of memory] is a bad, dry complexion, then it is accompanied by wakefulness, and one does not remember present moments, because it is difficult to imprint in dryness. However, one remembers events from the distant past, because separation occurs with difficulty in dryness.

In the opposite case, when humidity is the cause of the disease, long-term memory is affected:

> If it comes from humidity, then it is accompanied by a heavy and deep sleep and one remembers present moments well, because imprints occur easily in humidity. On the other hand, one does not remember events from the distant past because an imprint in a humid thing is easily washed out.[47]

This way of considering things was more useful for physicians because by changing the constitution of the patient, through medicine or regimen, the physician may hope to change the capacities of memory in order to improve it. It is therefore no wonder

47 Bernard de Gordon, *Lilium medicine* II, 13 (Venice: 1498), f. 28^{v}: "Si autem causa sit mala complexio sicca, tunc est cum vigiliis, et non memoratur de praesentibus momentaneis, quia de difficili fit impressio in sicco, tamen recordatur de praeteritis remotis, quia de difficili sit separatio a sicco. Si autem sit de humiditate, tunc est cum somno gravi et profundo et bene memoratur de praesentibus momentaneis, quia de facili sit impressio in humido, de praeteritis autem remotis non sit recordatio, quia de facili admottitur impressio facta in re humida."

that at the end of the Middle Ages the *Artes memorie*, which combined mnemonic devices with medical recommendations, encountered great success.[48]

5. Conclusion

So what was the effect of the Avicennian division of the internal senses on the medical conception of memory? We could assert, somewhat depressingly, that it was, on the whole, negative, since it forced physicians to adapt to a framework that did not correspond to their own system and that they largely tried to circumvent. Nevertheless, I think we can overcome this first impression by highlighting the fact that it had two important consequences. The first was that it forced physicians to seriously reflect on the question of the location of faculties in the brain, and thus on the brain's functioning. Of course, the results were often disappointing — but even today, the functioning of this organ remains largely mysterious — but this reflection pushed practitioners towards more concrete observation, sometimes emphasising anatomy. The second consequence was, ultimately, the progressive challenging of the global framework inherited from late Galenism: the ultimately unsurpassable theoretical inconsistencies that we have highlighted drove physicians in the Early Modern period to put that framework into question. We have already seen this emerging in the works of Gentile da Foligno and Jacques Despars.

But, to conclude, I would like to cite one last physician, another commentator on the *Canon*, but much later: Santorio Santorio. Santorio was an Italian physician who died in 1636. He was the author of a commentary on the first book of *The Canon* published in 1625. When Santorio comments on the passage where Avicenna describes the five internal senses, he asks, after his literal explanation: "Where do we find imagination, reason and memory?" His response is unambiguous: "Avicenna's assertion regarding the location of memory is absolutely contrary to Galenic doctrine and to anatomy."[49] For Santorio, the faculties are not located in ventricles of the brain, but in the very matter of the brain, and the functioning of the faculties does not depend on their location (front, middle, or back of the brain) but rather on the consistency of the organ's matter. Imagination is located in a "substance that can easily receive" and memory in "a stable and firm substance."[50] In this case, the simple

48 Cf. Mary J. Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture* (New York: Cambridge University Press, 1990).

49 Santorio Santorio, comm. *Canon* I, 1.6.5 (Venice: 1625), col. 786: "Utrum vero memorie sedes sit in posteriori cerebri ventriculo, ut tenet Avicennas in textu, nos luce meridiana clarius ostendemus in questione sequenti hanc Avicenne sententiam de sede memorie esse omnino alienam a doctrina Galeni, et ab ipsa anatomia."

50 Santorio Santorio, comm. *Canon* I, 1.6.5, col. 786: "Reiecta fuit superius hec opinio Avicenne et Averrois, primo hac ratione, quia ventriculi sunt cavitates, et cavitates nullam habent operationem, sed solum usum. Deinde recedit a Galeni auctoritate, quia cap. 12 *Artis medicine* asserit imaginationem residere in cerebri substantia facile susceptiva, discursum in substantia tenui et subtili, memoriam vero in substantia cerebri firma et stabili; numquam dixit, has precipuas cerebri operationes in ventriculis residere."

location in the ventricles is entirely abandoned in the name of authentic Galenism. But this is not a simple leap backwards that would have us forget the whole process; the systematisation proposed by Avicenna pushed physicians to reflect more closely on the concrete conditions of the functioning of memory, its disorders and also its anatomy. For this reason, Avicenna's instrumentalism paradoxically contributed greatly to the independence of medicine and to the promotion of anatomy as its specific tool of investigation, particularly in topics that fall between medicine and philosophy, such as the topic of memory.

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The First Latin Reception of the *De memoria et reminiscentia:* Memory and Recollection as Apprehensive Faculties or as Moving Faculties?

1. Introduction

This paper is dedicated to the first Latin literal commentaries and glosses on the *Translatio vetus* of the *De memoria*. These texts were composed in England from the end of the 1230s until the early 1250s,[1] a time when the *libri naturales* were not yet fully part of the program of the Faculty of Arts in Paris, and when no commentary on the *De memoria* had been produced there, to the best of our knowledge.

Adam of Bockenfield is an important figure in this tradition, as he is generally in the history of the early university reception of Aristotle's natural philosophy. But his domination of the English tradition seems to have been challenged, for once, by another competing commentary, a newly discovered text we have called the *Sententia libri De memoria et reminiscentia*. This text is preserved in three manuscripts, comes in various stages and has undergone two main redactions during the period considered. Some important ideas, everywhere echoed in the tradition as the opinion of "some people" (except by Adam of Bockenfield), are advocated in the prologue of the *Sententia* alone as the author's own position, without any other option considered.

1 For more on the chronology, see § 2 below. As for the commentaries by Adam of Bockenfield, an important landmark in this context, we think that they were composed during his career as a teacher at the University of Oxford, and we locate his academic activity in the 1240s, as does Charles Burnett ("Aristotelian Natural Philosophy in Great Britain. A Preliminary Survey of the Manuscript Evidence," in *Aristotle in Britain*, ed. by John Marenbon (Turnhout: Brepols, 1996), pp. 21–49). It is now generally agreed that Adam comes from the Northumbrian village of Bockenfield: see R. James Long's introduction to his edition of Adam's commentary on the *De plantis*: *Adam of Buckenfield, Glossae super de vegetabilibus et plantis: a critical edition with introduction,* (Leiden, 2012), p. 2. We have thus used the name "Adam of Bockenfield" instead of the earlier spellings of his name, like "Adam of Bocfeld" or "Buckfield."

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Memory and Recollection in the Aristotelian Tradition: Essays on the Reception of Aristotle's *De memoria et reminiscentia*, ed. by Véronique Decaix, Christine Thomsen Thörnqvist, Turnhout, 2021 (*Studia Artistarum*, 47), p. 123-152
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In spite of many shared exegetical materials in the literal explanation of Aristotle's treatise, Adam of Bockenfield and the master of the *Sententia* each defend a very different approach to the problem of the definition of memory and recollection in their prologues. Adam defines memory and recollection as "apprehensive faculties," while the master of the *Sententia* defines them as "cognitively moving faculties," dedicated to cognitive reflexive movements of the soul, a definition that enjoyed great success in the subsequent English tradition. Adam locates the *De memoria* after the *De sensu* because the former is dedicated to operations derived from the senses, while the *Sententia* sees the *De memoria* as the second part of the last part of the *De anima* ("De movente," in 432a18), dedicated precisely to "moving faculties."

The particular context in which the *De memoria* was first commented upon throws some light on these important variations in the interpretation of the text. When the *De memoria* began to be seriously studied in the Latin West, during the first decades of the thirteenth century, it was first approached in a context that was not dominated by the doctrine of Aristotle, far from it. As a consequence, recollection was often identified with an Augustinian notion of a pure intellectual memory. Avicenna's theory of internal senses, which very much occupied the field in psychology, offered a framework in which memory was not defined as a recall, was not concerned with the past, and was not based upon the phantasms preserved in imagination. Rather, on this view, memory was dedicated to the storage of "intentions." As for Averroes's *Compendia*, it is indeed a commentary on yet another version of the *Parva naturalia*, distinct from the one transmitted to the Latin Middle Ages (and to us); it could thus be of little use in the context of literal commentaries. Early masters such as Adam of Bockenfield[2] could not heavily rely on Averroes in interpreting the *De memoria,* as they usually did when interpreting other treatises, especially the *De anima* and the *Physics*.

The physiological and psychological descriptions of memory and recollection as being *both* sensitive faculties devoted to the preservation and to the recall of the past, thanks to a special relationship the soul entertains with its own past cognition, whose marks are preserved in a bodily organ: the whole theory was in fact a new idea. It was probably as difficult to understand in depth as it is nowadays, when the scholarship dedicated to Aristotle's text has left many puzzles unsolved and a variety of diverging interpretations.[3]

The difficulties were increased by the very problematic text which circulated at the time, a text we have called the *Versio vulgata* of the *Translatio Iacobi*, the Latin text established by James of Venice in the second quarter of the twelfth century.

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2 See Julie Brumberg-Chaumont, "La première réception du *De memoria et reminiscentia* au Moyen Âge Latin: le commentaire d' Adam de Buckfield," in *Les 'Parva Naturalia' d'Aristote: Fortune antique et médiévale*, ed. by Christophe Grellard and Pierre-Marie Morel (Paris: Publications de la Sorbonne 2010), pp. 121–41.

3 See for instance the different reading by Richard Sorabji, *Aristotle on Memory,* 2nd ed. (London: Duckworth, 2004), and by David Bloch, *Aristotle on Memory and Recollection: Text, Translation, Interpretation, and Reception in Western Scholasticism, Philosophia Antica*, 110 (Leiden–Boston: Brill, 2007).

The *Versio vulgata* was read by all the commentators on the *Translatio vetus* so far identified, Albert the Great included.[4]

The location of the *De memoria* within the Aristotelian corpus was also unclear. The *De memoria* first circulated together with the *De anima* but without the *De sensu* — the *De sensu* was probably not translated into Latin before the beginning of the thirteenth century[5] — and it probably long kept this location, that is, just after the *De anima*, in the subsequent tradition, even after the recovery of the *De sensu*. Moreover, the last sentence of the *De sensu* as we know it today, in which the *De memoria* is announced, was located at the beginning of the *De memoria* in the *Translatio vetus*. This could easily give the impression that the treatise that preceded the *De memoria* was the *De anima*, not the *De sensu*, or even that the *De memoria* was not part of the *Parva naturalia*, but rather part of the *De anima*. This moving textual reality created a confusing situation in which the very definition of memory was at stake.

The problem of the definition of memory was indeed closely connected at the time with the vexed issue of the location of the *De memoria*. Should it come after the *De sensu*, the position advocated by Adam of Bockenfield because memory and recollection are both apprehensive operations derived from the sense? Or should it come after/inside the *De anima*, as a continuation of the last chapter dedicated to the moving faculties of the soul, following the opinion of the master of the *Sententia*?

In this paper, we offer a detailed examination of the two main positions represented, on one hand, by Adam of Bockenfield, and, on the other hand, by the master of the *Sententia*, with a quick look at the way these positions were adopted, combined, and transformed in the subsequent English tradition.

2. The English Commentaries from the First Half of the Thirteenth Century

For sake of brevity, we first provide only a very brief description of each of the commentaries here studied, without entering into the arguments that can be adduced in favour of the various textual hypothesis we have adopted.[6]

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4 For the *Versio vulgata* of the *Translatio vetus*, but as read by Albert the Great, see *Alberti Magni Ordinis fratrum praedicatorum 'De nutrimento et nutrito', De sensu et sensato cuius secundus liber est de memoria et reminiscentia*, ed. by Silvia Donati (Münster: Aschendorff, 2017). We refer here to this edition for all the variants. The *Translatio Iacobi* has been edited by Silvia Donati in the *Aristoteles Latinus Database CDrom2* (http://www.brepols.net/publishers/pdf/Brepolis_ALD_EN.pdf).

5 See Griet Galle, "The Dating and the Earliest Reception of the *Translatio vetus* of Aristotle's *De sensu*," *Medioevo*, 33 (2008), pp. 1–90.

6 This paper focuses on the philosophical debates, and offers only a brief overview of the tradition in §§ 2 and 3. For more details on the history of the Latin translation and reception of Aristotle's treatise, on the *Versio vulgata* of the *Translatio Iacobi*, on Adam of Bockenfield and the commentaries ascribed to him, on the *Sententia*, and on the Oxford gloss, see Julie Brumberg-Chaumont, "English commentaries on the *De memoria* from the first half of the thirteenth century: traditions and doctrines," in Julie Brumberg-Chaumont and Dominique Poirel (ed.), *Adam of Bockenfield and his circle on the De memoria et reminiscentia*, Auctores Britannici Medii Aevi, 37 (Oxford: OUP–British Academy, 2021, forthcoming).

The early history of the exegetical tradition of the *De memoria* at Oxford probably unfolded according to the following steps.

The literal exegesis of the *De memoria* began after the *corpus vetustius* had been gathered in the 1230s, in the context of the highly interactive and productive schools of Arts at the nascent University of Oxford.[7] The reading of this corpus probably gave birth to a series of now lost marginal glosses, an early lost version of the 'Oxford gloss', according to the hypothesis of recent scholarship[8] dedicated to this corpus, that is, dozens of heavily glossed manuscripts of the *corpus vetustius* produced in England.[9]

Adam of Bockenfield's commentary, (that is, the 'authentic' 'second *redaction*' of his commentary[10]) must have been written sometime in the early 1240s or in the mid-1240s, as was Adam's commentary on the *De anima*, even though the two productions do not refer one to another. The text is transmitted in three manuscripts. We edited it and called it the commentary "In precedenti libro" in our forthcoming edition, where the ascription to Adam is accepted.[11]

The *Sententia* was probably composed at the same period as the commentary "In precedenti libro," of which the author of the *Sententia* apparently had no knowledge.

The *Sententia* recycled a series of glosses. This hypothesis is substantiated by the fact that important extracts of the text are found, though not copied verbatim, in Adam of Bockenfield's commentary, whereas Adam shows no knowledge whatsoever of the prologue of the *Sententia* in his commentaries on the *De memoria* and on the *De anima*. Additionally, the main part of the *Sententia* is not closely connected to the prologue, which was thus added to it afterwards. We have called the series of recycled glosses the 'proto-*Sententia*', to be distinguished here from the *Sententia*, by which we refer to the text with the added prologue.

The *Sententia* was composed after Adam of Bockenfield's commentary on the *De anima*, since Adam's ideas about the last division of the *De anima* are taken up and recycled in an innovative way in the prologue of the *Sententia*. The master of the *Sententia* thus added an original prologue and recycled the proto-*Sententia* where

7 See Burnett, "Aristotelian Natural Philosophy in Great Britain."

8 See Griet Galle, "Edition and Discussion of the Oxford Gloss on *De sensu*," *Archives* d'*Histoire Doctrinale et Littéraire du Moyen Âge*, 75 (2008), pp. 197–281.

9 For a recent synthesis on the 'Oxford gloss' or *Glossa anglicana*, see Emmanuelle Kuhry, "Vers une edition électronique de la glose d'Oxford," *Humanités numériques* 2 (2020): https://journals.openedition.org/revuehn/450; *ead.*, "The *Compilatio de libris naturabilis Aristotelis* (*Compendium philosophie*): Evidence for the Early Reception of the *Glossa anglicana* and of Adam of Buckfield's Commentaries," *Recherches de Théologie et de Philosophie Médiévales*, 86/2 (2019), pp. 283–313.

10 See René Antoine Gauthier (ed.), *Sancti Thomae de Aquino Opera Omnia LXV/2*, *Sententia libri De Sensu et sensato cuius secundus tractatus est De memoria et reminiscentia, Commissio Leonina*, ed. by René Antoine Gauthier (Rome–Paris: Commissio Leonina–Vrin, 1984), p. 117*.

11 See Adam of Bockenfield, Commentary "In precedenti libro," ed. in Julie Brumberg-Chaumont and Dominique Poirel, *Adam of Bockenfield and his circle on the De memoria et reminiscentia*, Auctores Britannici Medii Aevi, 37 (Oxford: OUP–British Academy, 2021).

he found elements[12] that could be fitted into the general framework provided by his prologue.

The *Sententia* is a very sketchy commentary that was rewritten two times, namely in what we have called the "Parisian/Florentine redaction" and in the "Munich redaction." The original version was not preserved, but subsequent English commentators had access to it.

The Munich redaction, found in a Munich manuscript,[13] comes without *dubia* and occupies only one folio, as the original *Sententia* probably also did. The Munich manuscript has been dated to the 1240s or ca. 1250 at the latest.[14] The Munich redaction refers to a previously recycled "sententia" regarding the literal explanation of one *lemma*, a reference that indicates a dating of the 1240s, or before, for the re-written, original *Sententia* itself.

The other version is the Parisian/Florentine redaction. It contains two *dubia* on internal senses, recollection, and the intellect, which are located at the end of the literal commentary. It is found in two manuscripts,[15] but in a later version, as we shall see. If the literal part of this redaction is compared to the Munich redaction, one can observe that almost no sentence is identical, the *incipit* is different, and the prologue is reworded on specific, yet significant, points. A very important comment in the prologue, according to which the objects of memory and recollection are sharply distinguished as, respectively, past *sensitive* cognition and past *intellective* cognition, is also located differently in the two redactions.

The Parisian/Florentine redaction came in two stages.

During the first stage, the original *Sententia* was probably recycled, reformulated for teaching purposes, and augmented with the two *dubia* on internal senses, recollection, and the intellect, *dubia* which are found in the Parisian/Florentine version. A final position, "according to Aristotle," is laboriously reached there, sometimes in very hesitant formulations, with traces of an oral exposition.

During the second stage, this *reportatio* was enriched with an additional *dubium* on the "art of memory," copied in two different places in the two preserved manuscripts. It is nowhere echoed in the subsequent English tradition, which indicates a late addition. This late version, with the *dubium*, has been discarded in the present contribution. The Parisian/Florentine redaction of the *Sententia* has been transmitted

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12 Such as the notion of a 'conversion' of the soul, or the idea that the method of recollection applies to an 'intelligible' object (see below, § 5.2).

13 MS Munich, Clm 14522, ff. 155va–156rb. It was first identified by Andrea Tabarroni, "'Omnis Phaenix est': Quantification and Existence," in *Sophisms in Late Medieval Grammar and Logic*, ed. by Stephen Read (Dordrecht: Springer, 1993), pp. 185–202 (p. 188).

14 We wish to express our deep gratitude to Patricia Stirnemann (CNRS/IRHT), who also located the Parisian manuscript in the last third of the thirteenth century, and to Maria Gurrado (IRHT/CNRS), who has independently confirmed the dating of the Munich manuscript to the 1240s or the very early 1250s.

15 The Parisian manuscript is Paris, BnF, MS lat. 16149, ff. 60rb–62ra. It was first identified by Gauthier in his edition of Thomas Aquinas, where he ascribed the text to Adam of Wytheby. The Florentine manuscript is Firenze, Bibl. Naz. Centr., Conv. Sopp. G. 3. 464, ff. 67vb–69rb. It was first identified by Theodor W. Köhler, *Homo Animal Nobilissimum* (Leiden–Boston: Brill, 2008), p. 54, n. 195.

in this enriched, late version (with the *dubium* on the "art of memory") in the two preserved manuscripts. However, for sake of brevity, we always refer from now on by "the Parisian/Florentine version" to the early version, with the *dubia* on internal senses and the intellect, and without the *dubium* on "the art of memory".

The commentary ascribed by René Antoine Gauthier to Adam of Wytheby in the introduction to his edition of the commentary by Thomas Aquinas[16] is in fact the Parisian/Florentine redaction of the *Sententia*, a text he read in the Parisian manuscript alone. If at all connected to the history of the *Sententia*, Adam of Wytheby would not be the "author" of the text, but, at most, the young recycler of a pre-existing *Sententia* in a teaching context. Since neither university records nor other historical documents testify to Adam of Whyteby, the period of his activity as a master has been reconstructed according to the doctrinal content of his commentaries, especially the *Questions* on the *De anima* that were ascribed to him. Because they displayed a position typical of the "second Averroism," according to Gauthier, the *Questions* were situated by the latter around 1265. However, a closer scrutiny has shown that the problem of the unicity of the possible intellect is addressed there differently from the way it is solved in the "second Averroism." As a consequence, we have proposed to date the *Questions* from around the mid-1250s,[17] rather than 1265. Adam of Wytheby's literal commentaries could be even earlier than that. This would fit the dating envisaged for the Parisian/Florentine redaction of the *Sententia*, that is, the very early 1250s.

What past scholarship has called the "first redaction" of Adam of Bockenfield's commentary is in fact an independent text, which we have called the commentary "Quibusdam naturalis philosophie" in our forthcoming edition[18]. It is preserved in five manuscripts and in two main versions. The first one is the "basic version," in which the *Sententia*'s distinction between the sensitive object of memory and the intellective object of recollection is not found. The second version is the "expanded version," in which this distinction is found. There is a lot of material in common with the *Sententia*, prologue included, but no full verbal agreement with each of the two redactions of the *Sententia* transmitted to us. The *dubia* of the *Sententia* in the Parisian/Florentine version are not echoed in the commentary "Quibusdam naturalis philosophie." More than any other text here considered, the commentary "Quibusdam naturalis philosophie" in the expanded version influenced the tradition of the Oxford gloss.

A "third redaction" has also been identified.[19] It is a completely independent text, found in three manuscripts, one of which being the Milan manuscript in which

16 See Gauthier (ed.), *Sancti Thomae De memoria*, p. 125*.

17 For arguments in favour of this hypothesis, see Julie Brumberg-Chaumont, "De unitate intellectus sine Averroistis," in *Sujet libre. Pour Alain de Libera*, ed. by Jean-Baptiste Brenet and Laurent Cesalli (Paris: Vrin, 2018), pp. 79–86.

18 See Anon., Commentary "Quibusdam naturalis philosophie," ed. by Julie Brumberg-Chaumont and Dominique Poirel, in *Adam of Bockenfield and his circle on the De memoria et reminiscentia*, Auctores Britannici Medii Aevi, 37 (Oxford: OUP–British Academy, 2021).

19 First identified, though not under that name, by Silvia Donati, "Albert der Große als Kommentator der *Translatio Vetus* der Schrift *De memoria et reminiscentia* des Aristoteles: seine Vorlage und seine Kommentierungsmethode am Beispiel von *Mem.* 2, 453a14–b4," in *Via Alberti. Texte - Quellen - Interpretationen,*

Gauthier read the "Notabile" of an anonymous "Oxonian master."[20] We have called this text the commentary "Quoniam ut complete" in our forthcoming edition[21]. It contains one *notabile* about individual memory after death, within the memory chapter of the literal commentary, two *dubia* about internal senses and the memory of beasts, located at the end of the memory chapter, and two *dubia* about memory, recollection, and the intellect, located at the end of the recollection chapter. All of them are closely connected to the *dubia* in the Parisian/Florentine redaction of the *Sententia*, but the text is never *verbatim* identical, and the doctrinal content is slightly, but significantly, different. It is highly probable that the literal commentary and the *dubia* were authored by the same master. The text is ascribed to "Adam the Englishman" in one manuscript, but the commentator is neither Adam of Wytheby nor Adam of Bockenfield. Most probably, he was an independently-minded student of Adam of Bockenfield. The prologue of the *Sententia* exerted a great influence on him. There is also a lot of material shared with the *Sententia* in the main body of the commentary, but, again, there is no full verbal agreement with either of the two redactions transmitted to us. There are also some elements stemming from the *Sententia* which are not also found in the commentary "Quibusdam naturalis philosophie" (ex "first redaction"). This means that the author of the commentary "Quoniam ut complete" probably had an independent access to the *Sententia*. The shared materials in the two series of *dubia* could be due to the fact that the commentator worked in the same environment as the author of the Parisian/Florentine redaction (Adam of Wytheby?). They were probably both inspired by the teaching of the same master when they wrote their own *dubia*, but explored different solutions to a series of very difficult questions.

The commentary "Quoniam ut complete" should probably be dated to the early 1250s, the period during which the Parisian/Florentine redaction of the *Sententia* was produced. The commentary "In precedenti libro", by Adam of Bockenfield, and the *Sententia* came first, followed by the commentary "Quibusdam naturalis philosophie" and the Munich version of the *Sententia*, all of them probably produced before 1250.[22]

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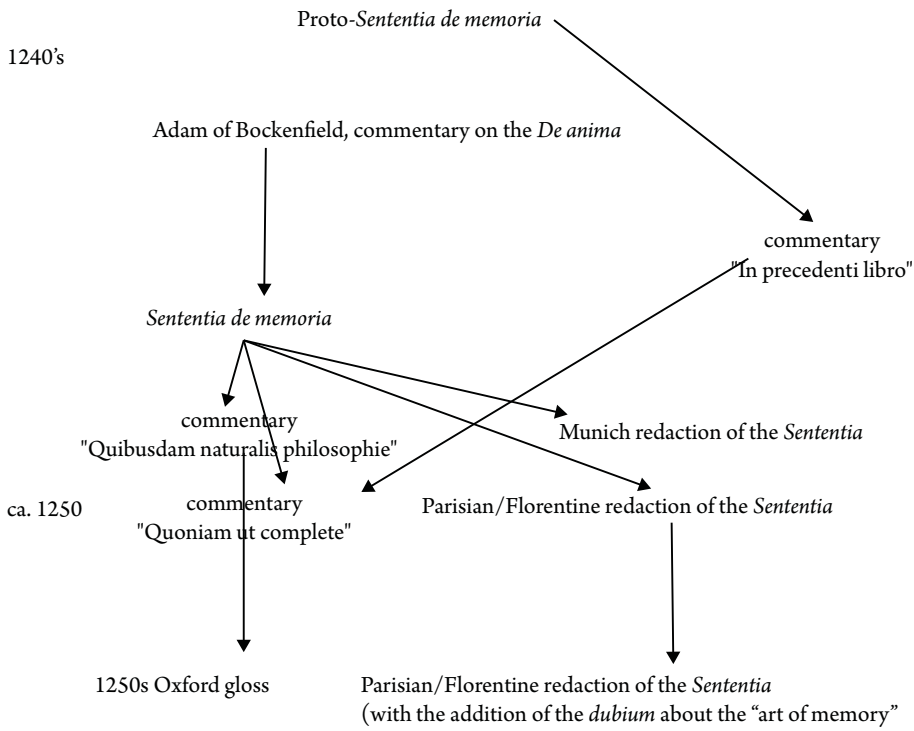
ed. by Ludger Honnefelder, Hannes Möhle, and Susana Bullido del Barrio, *Subsidia Albertina*, 2 (Münster: Aschendorff, 2009), pp. 509–59 (p. 541).

20 See Gauthier (ed.), *Sancti Thomae De memoria*, p. 117*.

21 See Anon., " Quoniam ut complete", ed. by Julie Brumberg-Chaumont and Dominique Poirel, in *Adam of Bockenfield and his circle on the De memoria et reminiscentia*, Auctores Britannici Medii Aevi, 37 (Oxford: OUP–British Academy, 2021).

22 Some echoes of the commentaries "Quibusdam naturalis philosophie" and "Quoniam ut complete" are indeed found in the *Compendium philosophiae*, a Parisian anonymous philosophical encyclopaedia probably composed in the Cistercian *studium* around 1250, according to Emmanuelle Kuhry. For the presence of our texts in the *Compendium philosophiae*, see Emanuelle Kuhry, "La *Compilatio de libris naturalibus Aristotelis et aliorum quarundam philosophorum ou Compendium philosophie*, Histoire et edition préliminaire partielle d'une compilation philosophique du XIII^e siècle" (unpublished doctoral thesis, Université de Lorraine, 2014), pp. 277–78. The commentaries "In precedenti libro", "Quibusdam naturalis philosophie" and "Quoniam ut complete" are echoed by Albert the Great's paraphrase of the *De memoria*, composed in 1256–57, or 1261/62 at the latest, as shown by Silvia Donati (see Donati (ed.),



The above diagram tentatively illustrates the chronology of the commentaries as well as their relationships. The asterisks signify that the text concerned, or the stage of the text concerned, has not benefited from any direct manuscript testimony.

3. The Development of the Exegesis: A New Scenario

As emphasised by Gauthier in his introduction to the edition of the commentary by Thomas Aquinas, Adam of Bockenfield is very clear about the fact that the *De memoria* should be located after the *De sensu*, among the treatises subalternated to the *De anima*, since it deals with some operations of the soul which depend on the senses, namely memory *and recollection*. Adam squarely rejects the opinion of

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Alberti Magni 'De memoria', p. 149, for a list of the references to our texts in the *apparatus fontium*). But an earlier *terminus ad quem* is probably to be preferred for various reasons we have only been able to hint at in the present contribution.

"many people" who would like to put it just after the *De anima*, but makes no further comment and, importantly, he offers no echo of the strong thesis advocated by the *Sententia*, as can be seen in the table below.

According to Gauthier, some contemporaneous or later masters would still mention this position, namely the location of the *De memoria* just after the *De anima*, which he called the "old-fashioned" position when referring to Adam of Wytheby's commentary.[23] The "standard position," found in Averroes's *Compendia*, was nevertheless the one defended by Adam of Bockenfield. It was also adopted by Albert the Great and by Thomas Aquinas, on different grounds, a few decades later.

This scenario must be factually revised if Adam of Wytheby is only the recycler of a pre-existing *Sententia* during the 1250s, as read in the Parisian/Florentine redaction, and not the author of the *Sententia*, around 1265. Moreover, this location for the *De memoria* was also clearly adopted as the correct one by Robert Kilwardby in the *De ortu scientiarium* (*ca*. 1250), though not without hesitation. It must have been judged to be still valid afterwards, as testified by the existence of two later independent copies of the *Sententia* enriched with additional material (namely the *dubium* on the "art of memory"), as found in the Parisian and Florentine manuscripts. The location after the *De anima* was recorded, together with the position given to it by Adam of Bockenfield's, thanks to the direct influence of the commentary "Quibusdam naturalis philosophie," in all of the Oxford gloss, a tradition which lasted until the end of the thirteenth century. It was also fully embraced by a remarkable anonymous continuous gloss found in one manuscript of the Oxford gloss, a text that we have called the "Durham gloss" (Durham CIV 18).[24]

Admittedly, the author of the commentary "Quoniam ut complete" scornfully rejects this location at the end of his prologue, quoted in the table below, and he adopts the location of the *De memoria* after the *De sensus*, but this not for the same reasons as Adam of Bockenfield did. Adam thought that this was the correct location because memory and recollection were derived from the sense. By contrast, the author of the commentary "Quoniam ut complete" accepts this location as correct because he adopts the definition of memory and recollection offered by the *Sententia* as cognitively reflexive movements of the soul. The justification adduced in the prologue is quite complicated, but it is based on a notion only fully developed in the *dubia*, namely that recollection belongs to the intellective part of the soul, even if based upon sensitive cognition (in the same manner as intellection, for that matter). Described in such a way, recollection cannot, in association with memory, be an "operation derived from the sense," as contended by Adam of Bockenfield. Memory and recollection are dealt with in the *De memoria* and after the *De sensu*, the anonymous commentator claims, because, as reflexive cognitively moving faculties, memory and recollection complete

23 See Gauthier (ed.), *Sancti Thomae De memoria*, p. 125*.

24 More on this anonymous gloss in Brumberg-Chaumont, "English Commentaries on the *De memoria* from the First Half of the Thirteenth Century: Traditions and Doctrines," § 5.6.

the end of *De anima* III, dedicated to "moving faculties," in the same way that the *De sensu* completes *De anima* II, dedicated to the senses. This far-fetched explanation allows the master to adopt the location after the *De sensu*, as found in Averroes and in Adam of Bockenfield, without adopting the dependence on the senses that goes with it. His solution was not, however, to be much appreciated in the subsequent tradition, where it is not echoed at all.

The situation just described means that in the middle of the thirteenth century, to the best of our knowledge, Adam of Bockenfield was alone in advocating the location of the *De memoria* after the *De sensu*, because it deals with operations derived from the sense, without considering any other option. All the other commentaries on the *De memoria* adopt one of three following positions:

(1) They adopt the location of the *De memoria* after or within the *De anima* as its last chapter, under the influence of the *Sententia*.

(2) They adopt an eclectic position, where both opinions, the *Sententia*'s and Adam's, are recorded, as in the commentary "Quibusdam naturalis philosophie," and in many other works in the English tradition belonging to the Oxford gloss.

(3) They adopt the location after the *De sensu*, but follow the *Sententia*'s ideas about the complementary relationships between the *De memoria* and the *De anima*, and not Adam's theory, as in the commentary "Quoniam ut complete."

Adam of Bockenfield held thus a minority position.

The notion that the *Sententia*'s ideas were more influential than those of Adam is reinforced if one takes into account the fact that the *Sententia*'s definition of memory and recollection as reflexive cognitively moving faculties is everywhere recorded in the prologues of the commentaries in the English tradition, even when the location after/within the *De anima* is not advocated, or not fully so. In addition, the idea, found in the *Sententia*, that recollection is targeted at the recovery of solely past intellectual cognition, in contrast to past sensitive cognition, recalled by memory, is recorded in the "expanded version" of the commentary "Quibusdam naturalis philosophie," in the Oxford gloss after it, and in the Durham gloss, while a similar idea is also found in the *De ortu scientiarum* by Robert Kilwardby. The notion of "intelligible species" reactivated in recollection is even introduced in the Oxford gloss and the Durham gloss. The whole theory of an intellectual memory targeted to the recovery of past intellectual cognition obviously contradicts Aristotle's doctrine, and it is clearly rejected by Adam of Bockenfield.

The prologues of the commentaries here studied[25] can be compared in the following table:[26]

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25 For sake of convenience, the prologue of the Durham gloss has not been included in the table. It contains not only the most complete record of the opinion of the *Sententia* so far identified, but an even more developed version of the argument, with details absent from the *Sententia*. It is probably to be located after all the commentaries here studied.

26 The quotation from the *Sententia* is a working transcription. For sake of brevity, we quote the *Sententia* in the Parisian/Florentine redaction, transcribed from the Florentine manuscript, with only a few important variants mentioned for the Parisian manuscript. The important doctrinal elements present

Commentary "In precedenti libro", ed. J. Brumberg-Chaumont and D. Poirel, ll. 1–16.	*Sententia de memoria et reminiscentia*, **Parisian/Florentine redaction MS Paris, f. 60rb–va = MS P/MS Firenze, ff. 67vb–69rb = MS F**	**Commentary "Quibusdam naturalis philosophie", ed. J. Brumberg-Chaumont and D. Poirel, ll. 1–20.**	**Commentary "Quoniam ut complete", ed. J. Brumberg-Chaumont and D. Poirel, ll. 1–43.**
In precedenti libro qui est *De sensu et sensato*, determinavit auctor de ipso sensu et sensibilibus ipsis et de instrumentis sensuum. Hic intendit **de quibusdam potentiis consequentibus ad sensum determinare**, que sunt memoria et reminiscentia. Et **licet ponatur a multis quod iste liber immediate sequitur librum *De anima*,**[27] tamen patet contrarium [...] et per Commentatorem [...]	Si duo capitula que sunt de memoria et reminiscentia sint de continuacione libri *De anima*, sic possunt cadere in divisione cum precedentibus.[28] Pars illa que est **de virtutibus apprehensivis** dividitur in duas. Prima est de apprehensivis **inquantum apprehensive** sunt, et terminatur ad capitulu[29] *De movente* [= *De anima* 432a18]; secunda **de apprehensivis in quantum post apprehensionem motive sunt.**	**Quibusdam** naturalis philosophie **doctoribus placet continuare librum illum libro *De sensu et sensato***, et tunc continuatur sic. Cum in libro *De sensu et sensato* agatur **de sensibus, ad quorum comprehensionem consequitur memoria et reminiscentia**, in hoc libro intendit determinare de memoria et reminiscentia, que sunt passiones **consequentes ad illas virtutes apprehensivas.** [= position of Adam of Bockenfield]	Quoniam, ut **complete habeatur scientia de anima** prout possibile est in hac vita, [...] necesse fuit tractatus speciales [= the *Parva naturalia*] ... constituere. [...] Cum igitur *De sensu et sensato* determinatum sit de sensu et sensato sive sensibili quantum ad ea que **incomplete** determinata fuerint de ipsis **in secundo** *De anima*,

in this redaction, and absent from the Munich redaction, have been pointed out in footnotes. The important doctrinal elements to be compared between the four commentaries have been put in bold.

27 The reference here to the opinion of "many people" cannot be identified with the opinion of the *Sententia* because the latter not only makes the *De memoria* follow the *De anima in the sense that it is part of it*, but also bases this location on a series of strong claims about the definition of memory and recollection as moving faculties, which are not echoed at all in the commentary "In precedenti libro."

28 This whole paragraph is absent from the Munich redaction.

29 Instead of "chapter", here the Munich redaction speaks of "part" (*pars*), and adds another sentence.

Et nota secundum Commentatorem quod memoria est in presenti **reversio speciei sensibilis vel intelligibilis** apprehensi in preterito.[30] Sed reminiscientia est inquisitio talis speciei per voluntatem, quando aliquis perscrutatur ipsam post absenciam eius mediante decursu rationis.	Secunda autem dividitur in duas. Prima est de apprehensivis inquantum motive sunt **corporis secundum** [**corporis, add. P**] **locum**, propter aliquod conveniens vel inconveniens apprehensum, et terminatur ad istum locum [i.e. 'RELIQUORUM AUTEM', the incipit of the *De memoria*]; secunda de apprehensivis in quantum **motive sunt anime ad apprehendendum** [**aliquid : *add.* P**] **prius apprehensum.** **Et hec pars continet hec duo capitula.**[31] ***See below***	**Quibusdam** autem placet ut **continuetur ad librum** *De anima* et tunc sic: cum **in ultimo capitulo** libri *De anima* determinetur de **virtutibus motivis corporis secundum locum**, **in hoc libro intendit de virtutibus apprehensivis, que sunt motive ipsius anime** [**ad iterum apprehendendum quod prius fuit apprehensum** = *add. expanded version*], **cuius sunt memoria et reminiscentia**, [**quia omne apprehensum aut apprehenditur a sensitiva, aut ab intellectiva.**	in hoc libro quem pre manibus habemus, qui intitulatur *De memoria et reminiscentia*, **est intencio determinare** de quibusdam in quibus **incomplete** determinatum est in tercio *De anima*. Est enim ibi intencio de **virtutibus anime apprehensivis, inquantum post apprehensionem sunt, scilicet motive.** **De virtute autem anime post apprehensionem motiva secundum locum,** scilicet motu processivo, sufficienter determinatum est in tercio *De anima* **in illo capitulo: *De movente autem*** [= *De anima* 432a18]. *Ø*

30 "Rememoratio est enim reversio in presenti intentioni comprehense in preterito," see Averroes, *Compendia librorum Aristotelis qui 'Parva naturalia' vocantur*, ed. by Emily L. Shields and Harry Blumberg (Cambridge, Mass.: Medieval Academy of America, 1949), p. 48. Here we have an illustration of a quotation where Averroes's definition is reported, but the notion of a species is substituted for the intention in the original text.

31 This sentence is not found in the Munich redaction, but the whole paragraph about the different cognitive objects of memory and recollection, beginning with: "Aliquid autem prius apprehensum non est nisi dupliciter, vel ab intellectu, vel a sensu …," recorded in the expanded version of the commentary "Quibusdam nauralis philosophie," is located here.

		Unde virtus apprehendens **prius apprehensum ab sensitiva dicitur "memoria", et apprehendens prius apprehensum ab anima intellectiva dicitur "reminiscentia"** *= add. expanded version*].[32] [= position of the *Sententia*]	
	Ex hiis videtur quod **hec pars sit de continuatione libri *De anima* sicut pars precedens, que est *De movente.*** Sicut enim ibi agitur de apprehensivis inquantum motive sunt **uno modo**, sic hic agitur de illis eisdem inquantum motive sunt **alio modo**; [...]	**Quibusdam tamen placet** sic distinguere quod ista **nomina** "memoria" et "reminiscentia" possunt nominare ipsas virtutes; sic **iste tractatus est de substantia libri** *De anima*, ubi agitur de virtutibus anime in communi. Vel possunt nominare ipsas **passiones** virtutum; et tunc potest dici quod **iste tractatus** computatur inter libros particulares qui subalternantur libro *De anima* et **immediate ordinatur post librum** *De sensu et sensato.*	De virtute autem apprehensiva **post apprehensionem motiva, non secundum locum**, restat in hoc libro determinare. Que quidem est duplex, scilicet memoria et reminiscentia. **Sunt enim virtutes apprehensive post apprehensionem motive ipsius anime ad aliquid apprehendendum quod prius fuit apprehensum**, ut infra patebit.[33] Et **sicut tercius liber sequitur ad secundum librum, similiter liber *De memoria et reminiscentia* ad librum** *De sensu et sensato*.[34]

32 This distinction is not recorded in the commentary "Quoniam ut complete", which sticks to the Aristotelian theory on this point. It is recorded in the Durham gloss.

33 I.e., when the definition of memory will be addressed (see below, § 6).

34 Here we can see how the location of the *De memoria* after the *De sensu* is defended without any reference to Adam of Bockenfield's position (i.e., that memory and recollection are derived from the sense), but following the *Sententia*'s position about the definition of memory and recollection as moving faculties.

	Prius autem apprehensum non est nisi dupliciter, scilicet vel ad apprehendendum **prius apprehensum ab** [**anima add. P.**] **sensitiva, vel ab intellectiva**. Quare motus anime ad accipiendum aliquid prius apprehensum non est nisi dupliciter, scilicet vel **ad apprehendendum prius apprehensum ab anima sensitiva, et sic est memoria proprie ; vel ab intellectiva, et sic reminiscentia.**		[...] **Qui autem volunt istum librum continuari** cum libro *De anima* **ponunt ipsum in divisione cum illo capitulo De movente,** dicentes quod ... [= the position of the *Sententia*] [...] De ista autem diversitate non est multum curandum[35]. Verumtamen quod non sit de eadem continuationem cum libro *De anima*, satis habetur ex verbis Aristotelis tam in hoc libro quam in libro *De sensu et sensat.*

We can notice that the textual relationship between the *De memoria* and the *De anima* is expressed in different ways in the two redactions of the *Sententia* ("parts" in the Munich redaction, "chapters" in the Parisian/Florentine redaction), and that these views are rather clumsily reported by the commentaries "Quibusdam naturalis philosophie" and "Quoniam ut complete". The *De memoria* is both a "book" that "follows" the "book" of the *De anima*, and a part of the very same book ("de substantia libri *De anima*" in the commentary "Quibusdam naturalis philosophie," "in divisione cum illo capitulo de movente" in the commentary "Quoniam ut complete"). This shows that the notion of a 'book' was not as clear-cut at it is now for us, in the age of printing. This is illustrated, for instance, by Adam of Bockenfield's division of the *De anima.*

35 This sentence shows how the debate is recorded in a more careless way here than in the commentary "Quibusdam naturalis philosophie," where it appears in the first sentence of the prologue. The eclectic presentation of the commentary "Quibusdam naturalis philosophie" is followed by all the texts from the Oxford gloss in the subsequent tradition. This shows that the presentation of both branches of the alternative, as useless as it may have appeared to the author of the commentary "Quoniam ut complete," was still worth mentioning throughout the second half of the thirteenth century at Oxford.

It also reflects the mutation that the question of the division of the *De anima* underwent at the time, as well as a problem of coherence. The division of apprehensive faculties in the *Sententia*, which is also that of Adam of Bockenfield, means that the content of last book of the *De anima* begun in 427a17 (as often was the case in this period) is heterogeneous as a whole, since mainly dedicated to 'internal' apprehensive faculties as apprehensive faculties (intellect included), but with a last chapter on a different topic, namely apprehensive faculties as moving faculties. Furthemore, this division becomes utterly untenable if the other division in the process of being adopted at the very same period, namely the 'Arabic' division of book III in 429a10, as dedicated to the intellective part of the soul alone, is followed. The last chapter "De movente…" (432a18), of which the *De memoria* is supposed to be the continuation according to the *Sententia*, can well be part of the *De anima*, but it cannot be part of book III, since the moving faculties considered in this last chapter are as much animal sensitive faculties, connected to the appetite, as properly human faculties, connected to the practical intellect. This created an awkward situation for the location of the chapter "*De movente*" in commentaries on the *De anima* from this period.[36] By contrast, the author of the commentary "Quoniam ut complete" confidently says that the *De memoria* is a continuation of book III, something not even explicitly defended by the master of the *Sententia*.

The notion of an important influence of the new ideas introduced by the prologue of the *Sententia* must be qualified, though, since it is limited to the prologues of the texts here studied, and does not concern the main body of the literal commentaries. In the actual exegesis of Aristotle's definition of memory and recollection, the notion of memory and recollection as "moving faculties" is not used in the tradition, following the *Sententia* itself, where the formula does not appear again in the literal part of the text. As seen, the original ideas of the *Sententia* were articulated in the new prologue that was added to a pre-existing literal commentary (the proto-*Sententia*) by the master of the *Sententia*. They apparently continued to enjoy quite an independent exegetical career in the prologues of the subsequent English tradition.

As we shall see below in more detail, an indirect connection with the literal part of the commentaries influenced by the *Sententia* can nevertheless be established. The author of the commentary "Quoniam ut complete" obviously sees his definition of memory as "an apprehension of an apprehension" as the logical consequence of his

36 The anonymous commentary edited by Carlos Bazán adopts the Arabic division of book III, and says that the chapter dedicated to moving faculties is distinct from book II and *even from book III* ("et posset dividi hoc capitulum contra secundum librum *et tertium*, cum intendat hic de movente in hominibus et brutis animalibus"), see Anon., *Anonymi magistri Artium (c. 1246–1247), Sententia super II et III De Anima*, ed. by B. Carlos Bazán, (Louvain-la Neuve: Peeters, 1998), p. 476. The anonymous Parisian commentary edited by René Antoine Gauthier seems to be of the same opinion, since it says that book III of the *De anima*, which also begins in 429a10 according to this commentary, deals only with the intellective soul and stops at the "part" beginning with "De movente," see Anon., *Lectura in Librum de Anima a quodam discipulo reportata*, ed. by René Antoine Gauthier (Rome: Editiones Collegii S. Bonaventurae ad Claras Aquas, 1985), p. 447. The anonymous commentator does not comment upon this last chapter of the *De anima*.

adoption of the definition of memory as a "moving faculty". As for the commentary "Quibusdam naturalis philosophie", it does once echo the notion of a "moving faculty" in the literal part of the text, balancing this notion with the definition, taken from Adam of Bockenfield, of memory as an apprehensive faculty, thereby displaying a clear awareness of the alternative solutions offered by the two models it was following. The adoption of the notion of memory as a "focus on the affection", rather than just an "affection", as contended by Aristotle himself, by the commentaries "Quibusdam naturalis philosophie" and "Quoniam ut complete", could be seen as pointing to the same connection.

4. Shared General Exegetical Features: The Early English Tradition and the Subsequent Commentaries by Albert the Great and Thomas Aquinas

Before turning to the various accounts of memory and recollection developed by the master of the *Sententia* and by Adam of Bockenfield, the existence of a significant number of shared elements in all the literal parts of the here studied commentaries must be emphasised.

First, the context of literal commentaries led to similar projects of tentatively explaining Aristotle's text 'by itself'. This probably explains why the notion of intention is everywhere silenced, obviously in texts where Averroes is absent (as in the early *Sententia* or in the commentary "Quibusdam naturalis philosophie"), but also in texts where the Arabic philosopher is quoted, and *even while quoting* him (as in the commentaries "In precedenti libro" and "Quoniam ut complete"), or *while discussing* the "cogitative" faculty, as in the *dubia* of the commentary "Quoniam ut complete" and of the Parisian/Florentine version of the *Sententia*.

This strongly contrasts with the treatises and commentaries on the soul from the first half of the thirteenth century, which heavily relied on the division of the faculties of the soul and the notion of intentions developed by Avicenna (and by Averroes). It is also in contrast with Albert the Great's *De homine* and paraphrase on the *De memoria*, as well as with the question commentaries from the last third of the thirteenth century. Finally, this practice contrasts with the eclectic presentation of the Oxford gloss, where intentions are mentioned as the objects of memory, in addition to the phantasms preserved in imagination.[37]

A series of shared general doctrinal elements between all our English commentaries are also to be emphasised. They probably emerged naturally from the study of the same textual problems, rather than being only explained by the direct influence of the early commentators, such as Adam of Bockenfield or the master responsible for the proto-*Sententia*.

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37 The next 'Aristotelian' commentary, the one composed by Thomas Aquinas, does not use Averroes except for the division of the *Parva naturalia*. It 'Aristotelizes' Avicenna's intentions, reducing them to the intention that consists in looking at phantasms as likenesses (see Thomas Aquinas, *De memoria*, 115.221; 116.226).

4.1. Memory and imagination

For all our authors, following Aristotle, memory is based on the very same phantasms as those on which imagination works. It thus implies a distinction between two considerations of the phantasm, an idea also found in Aristotle's text itself.[38] Opposed to the consideration of the phantasm in memory, "as a likeness," is the consideration of phantasms "for itself." The phantasm is, in both cases, "one and the same" according to Aristotle. This distinction is also found in Albert the Great and Thomas Aquinas, both of whom borrow it from Aristotle. More precisely, our English commentators all reformulate the idea by saying that the phantasm is the same in substance (*secundum rem/subiectum*) but that it has two different ways of being (*secundum esse/rationem*), a formula also found, for instance, in Albert the Great.[39]

But all our authors offer a quite puzzling description of imagination, corresponding to the case where the phantasm is considered in itself: their description suggests that imagination would be a sort of 'reverie' on one's own impressions, as we shall see below. This conception would tend to assimilate imagination to a special sort of self-sensation, and it apparently deprives imagination of any 'objectual' content, or epistemological dimension. The theory is extended by the author of the commentary "Quoniam ut complete," in a very interesting manner, to cases in which a cognition of the past is gained from the contemplation of a phantasm without an apprehension of the previous past apprehension: this is also, for him, a case of "imagination," an "imagination of the past." This can happen, we may think, when one vaguely thinks about one's deceased mother, for instance, without apprehending any of one's past apprehensions of her.

The idea remained generally quite superficial, though, without any commentator displaying a strong awareness of the problems it might raise.

By contrast, Albert the Great, probably because of the larger intellectual framework in which he was working, avoided this idea carefully when describing Aristotle's "duplex consideratio."[40] In the case of the phantasm being seen "for itself," he finds in Aristotle's text a distinction between the senses and the intellect.[41] He thus further distinguishes two cases: on one hand the consideration of the phantasm by the senses (whether external or internal),[42] and, on the other hand, the consideration by the intellect, which gives rise to the abstractive process.[43] In each case, however, the cognition thereby obtained is 'objectual', that is, targeted to the cognition of a reality (*res*), not to the phantasm itself. This is because the phantasm "in itself," is

38 "Alia passio speculationis … et alia …", see Donati (ed.), *Alberti Magni 'De memoria'*, 120.34, for all the variants.

39 See Albert the Great, *De memoria*, 123.1–3.

40 "Duplicis considerationis": Albert the Great, *De memoria*, 122.61–62. See Decaix' contribution in this volume.

41 "Speculationem aut fantasma" (422b20), see Albert the Great, *De memoria*, 120.31.

42 Albert the Great, *De memoria*, 122.37–38.

43 Albert the Great, *De memoria*, 122.39–41.

seen as essentially containing a reference to things.[44] This reference is received by the senses, in a movement towards the soul that begins from the thing and ends with abstractive intellection. The other consideration, the one in which the phantasm is seen as a likeness, gives rise to a reflection (*reflexio*) targeted to the thing of which the phantasm is a likeness.[45] There is in this case a contrary movement, from the soul towards the things.[46] This movement[47] allows, once again, a cognition of reality, namely of the sensitive particular reality that was at the origin of the impression of the phantasm[48] in memory, not a cognition of the phantasm itself. Note that although relying on a movement "from the soul" towards the thing, memory is still classified among "passive faculties," as are all the sensitive apprehensive faculties.[49] Not incidentally, the notion of a focus, a *conversio* of the soul, is absent from Albert's paraphrase on memory.

Thomas Aquinas also offers a complex picture in which the consideration of the phantasm in itself again divides according to sensitive and intellectual cognitions. In the new translation he was reading, however, the distinction is this time between the phantasm as pregnant with an intelligible content (*speculamen*)[50] or something intelligible (*intelligibile*), and the phantasm as a phantasm (*fantasma tout court*), what he calls the "*fantasma simpliciter.*" The focus (*conversio/consideratio*) on the phantasm in itself thus gives rise either to "imagination," the consideration of the phantasm "as a phantasm", with no further explanation by Thomas, in his commentary (although the notion is richly used in his other works),[51] or to the consideration of something intelligible in the phantasm by the intellect,[52] that is, when the phantasm is considered by the intellect according to what is universal in it.[53] By contrast, the consideration of the phantasm as a likeness of something else gives rise to memory, and thus, to a cognition of the particular,[54] not of the phantasm itself. It is no coincidence that the term *reflexio*, and thus the notion of a *reflexio ad fantasmata*, which Thomas Aquinas takes to involve an indirect intellectual singular cognition of individuals in many other texts,[55] is absent from his commentary on the *De memoria.*

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44 "Si accipiamus ipsum [fantasma] prout absolute quiescit in anima **notitiam de re faciens**", Albert the Great, *De memoria*, 122.20–21.

45 Albert the Great, *De memoria*, 122.56.

46 Albert the Great, *De memoria*, 123.4–9.

47 Albert the Great, *De memoria*, 123.4–9.

48 "Ad rem a quo acceptum fuit [fantasma] referatur," Albert the Great, *De memoria*, 122.23–24.

49 Albert the Great, *De memoria*, 121.49–51.

50 "Speculamen" (instead of "speculationis") in the Moerbekiana.

51 "Simpliciter fantasma quod vis ymaginativa apprehendit," Thomas Aquinas, *De memoria*, 115.196–97; "Actus est ymaginationis sive fantasie", Thomas Aquinas, *De memoria*, 115.217–18.

52 "Aliquid intelligibile quod intellectus in fantasmate inscipit," in Thomas Aquinas, *De memoria*, 115.194–96.

53 "Intellectus considerantis circa hoc universal," Thomas Aquinas, *De memoria*, 115.218–19.

54 "Circa particularia", Thomas Aquinas, *De memoria*, 115.214.

55 This is the way Thomas Aquinas notoriously describes in various works the indirect intellectual singular cognition of the individuals, thanks to a reflection on the phantasm performed by the intellect. It bears great resemblance, especially the last part of the regressive process from the phantasm to the individual reality, to some passages in the *De memoria*, according to which the intellect considers the phantasm as a likeness of something else, i.e., of the individual of which it is the phantasm, in memory. But the notion

4.2. Memory, recollection, oblivion and recall

Even if the aspect of memory as storage is not denied, all the commentaries here studied also see as obvious (that is, as obviously 'Aristotelian' in their eyes) a conception of memory as essentially (or "in actuality") a recall, a reiterated apprehension of something already apprehended in the past.

As a consequence, probably under Averroes's influence, they generally see oblivion, or a form of unawareness — an "interrupted" cognition, in Averroes's words — as a condition for recall, properly speaking, and thus, for memory. This thesis contradicts Aristotle's explicit words (451a31–451b6), although they probably did not realise that. This interpretation will be strongly challenged in commentaries by Albert the Great and Thomas Aquinas, and then by the question commentaries redacted by the next generation of masters.

Another consequence of this emphasis on recall is that they all define recollection as a recall of a special kind, that is, a recall performed syllogistically through a process of inquiry, without discovery or teaching, whereas memory is a recall obtained by whatever means. They also tend to suggest that the imprint in memory on which recall is based has been just out of one's mind. In recollection, by contrast, the imprint would have been utterly or partially erased, so that the imprint of *another* item would have to be taken as a starting point for the recollection of the forgotten, searched for, item.

By contrast, for Thomas Aquinas, memory is not a recall and it presupposes no previous oblivion or interrupted cognition, while recollection presupposes memory, but is not the re-acquisition (*resumptio*) of memory. Recollection is the independent re-acquisition of the very same thing that was apprehended in the past of which there has been memory. In substance, recollection is the re-acquisition (without discovery and teaching) of an item first remembered, then forgotten, that is, erased from memory, and then recollected rather than 're-remembered.'

When it comes to the general definition of memory and recollection faculties in the prologues, however, the opinions of our English commentators come to diverge in a significant manner. This is a result of different views about the proper location of the treatise within Aristotle's natural philosophy.

5. The Prologue of the *Sententia*

The master of the *Sententia* introduced two new doctrinal elements in his prologue. These are echoed everywhere in the tradition as the opinion of "some people," except

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of 'reflection' is absent there, and so is, conversely, the question of the intellectual singular cognition of the individual in the *De memoria*. If it had been introduced, on top of the three items present in our text, namely the universal intellective cognition in the phantasm, the imaginative cognition, and memorative cognition of the past individual, it would have made necessary a distinction Thomas probably did not want to deal with, between a memorative singular intellectual knowledge of the individual as causally related to the phantasm it originates, i.e., as past (in memory), and a non-memorative singular intellectual cognition of the individual as related to the phantasm by way of a resemblance relationship.

in the commentary "In precedenti libro" by Adam of Bockenfield, as can be gathered from the table just given above. The master of the *Sententia* advocates them as his own opinion, referring to no other option.

The two new elements are the following: 1) the location of the *De memoria* inside the *De anima* as the second part of the last part beginning with "De movente" in 432a18; 2) the definition of both memory and recollection as cognitively moving faculties directed to reflexive cognitive movements of the soul — that is, the reiterated apprehensions of one's own past cognition — as opposed to cognitively moving faculties directed to local movements of the body, dealt with in the chapter "De movente."

We additionally find the description of recollection as targeted only at the recall of past intelligible cognition.

5.1. A skilful Reassessment of Traditional Ideas in an Aristotelian Framework

The notion that the *De memoria* should be considered a part of the *De anima* existed in the very early tradition; one can find it already in John Blund's *De anima* (*c.* 1200).[56] However, the theoretical and textual connections between the two elements as making one book were never made clear before the *Sententia*.

The master of the *Sententia* takes a series of pre-existing elements and makes something new out of them in his prologue. He thereby offers new Aristotelian life to the traditional location of the *De memoria* after or within the *De anima*.

The various elements employed by the *Sententia* all originated from a connection between the treatise on memory and recollection and some passages in the *De anima,* the literal exegesis of which probably began a decade before that of the *De memoria*.

The master of the *Sententia* took from Adam of Bockenfield's commentary on the *De anima* (the authentic 'first redaction') the idea that the last division of the *De anima,* in 438a18 ("*De movente*"), was a section dedicated to the "apprehensive faculties as moving faculties" of the soul, concerned with the representations associated to local movements of animals and men. He also took from Adam the idea, inspired by Aristotle himself (432a15–18) that the text beginning with "*De movente*" would be a sub-division of a very big section dedicated to apprehensive faculties, of which the first part is dedicated to apprehensive faculties "as apprehensive faculties," as opposed to the same "as moving faculties" (432a18 till the end of the *De anima*). The former

56 "Sciendum est quod Aristoteles distinguit **in fine libri** *De anima* inter memorari et reminisci dicens: 'Differt autem ab ipso remorari reminisci non solum secundum tempus' …" [= *De mem.*, 453a5–10] … et ideo Aristoteles **in eodem libro** dicit quod 'meditationes salvant memoriam in reminiscendo' [= *De mem.*, 451a12]", John Blund, *Tractatus de anima,* ed. by Daniel Callus and Richard W. Hunt (London: OUP–British Academy, 1970), p. 74; new edition with introduction and English translation in *John Blund: Treatise on the Soul*, ed. by Michael Dunne and Richard W. Hunt, Auctores Britannici Medii Aevi (Oxford: OUP–British Academy, 2012).

includes book II (external senses) and most of book III, begun for Adam in 427a17 (that is, with the discussion on imagination and intellection).[57]

We find, however, no allusion to the *De memoria* in Adam's commentary.

As for the notion of memory and recollection as movements *of the soul* in a strong sense, it was probably inspired by *De anima* 1.4, 408a30 *sqq.* There, Aristotle says that the soul in itself is not subjected to local movement nor to alteration (as in the case of affections, such as sensations and emotions), but rather that it is the subject in which the soul is, (namely the human being as a corporal reality) which is moved. Next, Aristotle makes a distinction between sensitive movements that begin *from the body and move towards the soul*, and recollection movements that *begin from the soul and move towards the sensitive instruments of the body* (408b16–18). We have already seen an echo of this distinction between directions of movements in Albert the Great's paraphrase.

The passage in *De anima* 1.4, 308a30 *sqq.* is clearly dealt with by Adam of Bockenfield in his commentary on the *De anima*.[58] It is also emphasised in the Parisian anonymous commentary on the *De anima* edited by Gauthier, which introduces on this occasion the same notion of "focus"[59] found in the *Sententia*, as we shall see below.

In both cases, once again, no connection is made with the *De memoria*.

The distinction between directions of movements is not precisely reported by the master of the *Sententia*, but he seems to have been inspired by it in strongly distinguishing memory movements, on one hand, and sensation or imagination movements, on the other hand. This distinction influenced him to such an extent that he did not put memory and recollection in the division of the *De anima* dedicated to apprehensive faculties.

The idea of "movements stemming from the soul," movements "of the soul" in a strong sense, might have been associated with the notion found in *De anima*, 433a5 *sqq*. according to which cognitive faculties are responsible, together with appetite

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57 "In parte proxima precedenti determinatum est de parte vegetativa et vivificativa. In hac tota parte sequenti usque ad finem huius libri [= the *De anima*] est intentio determinare de parte anime apprehensiva. Et potest tota hec pars dividi in duas, in quarum prima determinat de apprehensiva parte anime in quantum est apprehensiva; in secunda, que incipit fere in finis huius libri [= the *De anima*], ibi, scilicet '**De movente autem**', intendit de ipsa **in quantum post apprehensionem est motiva secundum locum**. Prima adhuc dividitur in duas, in quantum prima determinat de parte anime apprehensiva deforis, cuiusmodi est sensus, et terminatur ad tertium librum [= *De anima* II], ibi scilicet: 'Quoniam autem duabus differentiis' (= 427a17 beginning of *De anima* 3); in secunda intendit de parte anime apprehensive intus, cuiusmodi sunt intellectus et imaginatio", Adam of Bockenfield, *Magistri Ade de Bocfeld commentarium in tres libros de anima Aristotelis*, ed. by Helen Powell (unpublished doctoral thesis, University of Oxford, 1964), p. 164.

58 "Huiusmodi motus non sunt in anima tamquam in subiecto, sed fiunt ad illam et ab illa; ad illam, ut **motus sensus** qui fit **ab ipsis sensibilibus ad animam, ab illa, ut motus rememorationis, qui fit ab anima,**" Adam of Bockenfield, *Magistri Ade de Bocfeld commentarium*, pp. 77–78.

59 "Motus qui est secundum quod anima memoratur et reminiscit, huiusmodi est **ab anima ad res**, secundum quod **anima se convertit supra species receptas**; et sic distinguit duplicem motus, unum qui est **ab animam ad rem**, alium qui est a rebus ad animam" [= " secundum quod species deferuntur ad anima per virtutes apprehensivas", a few lines above], Anon., *Lectura in Librum de anima*, ed. by René Antoine Gauthier, p. 121.

and practical intellect, for local movement since they furnish the knowledge of the desired object. This is why Adam of Bockenfield says in his commentary on the *De anima* that Aristotle is dealing there with moving faculties for movements that "come after apprehension" (*post apprehensionem*).

The synergistic reading of these passages from the perspective of the location of the *De memoria* inside the *De anima* may have given rise to the idea that memory and recollection would be "cognitively moving faculties," responsible for cognitive movements "of the soul" as opposed to "local movements of the body."

Equipped with this series of innovative connections, the master of the *Sententia* could offer for the first time an explanation of exactly in which way the *De memoria* could be fitted into the *De anima*: the last chapter of the *De anima* beginning with "*De movente"* is only the first part of a bigger part, dedicated to "cognitively moving faculties" at large. The first part is dedicated to the cognitively motivated local movements of the body, until the end of the *De anima* as we know it today, the second part to "cognitively motivated cognitive movements", that is, to the reiteration of one's own past cognition, dealt with in *De memoria et reminiscentia*.

It thus offered an innovative explanation for old ideas, and exerted a deep influence on the English tradition, that is, on the commentaries "Quibusdam naturalis philosophie" and "Quoniam ut complete," as well as on the texts from the Oxford gloss.

In addition, one might think that the theory also made useless, in a way, the introduction of "intentions", as developed by Avicenna and Averroes, in the context of a treatise on memory: they correspond to the type of cognition in the *De anima* that motivates *local* movement, namely the recognition of what is agreeable and what is disagreeable, leading to attraction or repulsion in the appetitive faculty — or in the practical intellect, in the case of human beings. But this type of cognition is dealt with by the chapter beginning with "*De movente*" in the *De anima* (as for instance in *De anima*, 432b27 *sqq.*), according to the *Sententia*, and thus *not* in the *De memoria*.

5.2. Some Coherent Elements in the Literal Part of the Sententia

In the body of the commentary, the movement of the soul is described as a "focus" (*conversio*) on its own internal affections. This movement is connected with the already-mentioned distinction between two considerations of the soul. However, with the notion of focus, an emphasis is put on the movement performed by the soul, which is distinct from the affection, and which bears on it. This can be seen when Aristotle's aporia of memory is presented:

> Mediante sensu exteriori recipitur passio in anima, que quidem ibi imprimitur sicut pictura in tabula et sicut figura in cera. **Cum ergo convertit se anima super passionem, aut est memoria passionis presencialiter speculate, aut rei absentis, a qua ortum habet.**[60]

60 *Sententia libri de memoria et reminiscentia*, Parisian/Florentine redaction, MS P, 60vb/MS F, 68ra; the Munich redaction has almost the same text.

As a consequence, the *Sententia* offers a minimal comment on Aristotle's definition of memory as an "affection" (*passio*).

The movement is then twofold: either it considers the phantasm in itself (as in imagination), or it goes further, to the past things which initially originated the impression of the phantasm. The memory movement can be thus described as a focusing movement of the soul towards its internally retained phantasms, aimed at the re-apprehension of what was apprehended in the past. As for the focusing movement which considers phantasms in itself, in imagination, we can interpret the *Sententia*'s idea it in two ways: either it is a directed movement beginning from the soul, different from the memory movement, an imaginative movement of a soul in quest of reverie, or it is an interrupted memory movement, when the soul, focusing on its phantasms, stops at them instead of achieving the memory movement towards the very past thing. The latter hypothesis, where imagination movements are just by-products of non-achieved memory movements, seems more likely. This would explain why our author does not bother to explain in great detail the case of the consideration of the phantasm in itself, where no external object is apparently targeted.

The notion of memory as depending on a power of the soul focusing on its affection, rather than being itself an affection, perfectly fits the notion of memory *and recollection* as moving faculties, in a theory where memory/recollection are movements "of the soul" as opposed to movements "of the body." This notion can explain how memory and recollection movements both begin "from the soul." It can also explain why memory and recollection are not physiologically caused by affection movements in the sensitive part of the soul — even though obviously conditioned by them, since memory is performed *per se* with phantasms, and recollection is described as a "bodily affection attributed in some way to an organ (*passio corporea alicui organo quodam modo attributa*)," as the *Sententia* puts it. Even movements beginning from the soul are not movements "in the soul" as in a subject, but they are rather in the compound of soul and body, as made clear by Aristotle in the *De anima* 408a30 *sqq*. Although the explanation is not articulated as such in the text, one can think that it is probably the focusing movement that moves the stored mark in the sense organ so that it is reactivated, rather than the other way around. By contrast, for Adam of Bockenfield, memory in an "affection", the re-reception of a phantasm, even if seen as a likeness, as we shall see below.

The notion of focus (*conversio*), also heavily present in Thomas Aquinas's commentary on the *De memoria*, is echoed in the commentaries "Quibusdam naturalis philosophie" and "Quoniam ut complete." It was probably already present in the proto-*Sententia* recycled by the master of the *Sententia*, where it fitted in very well with the new definition of memory and recollection introduced in the prologue. This may have played a role in the master of the *Sententia*'s decision to reuse the proto-*Sententia*, rather than other pre-existing glosses.

The same could also be said for the description of the object of recollection as "the intelligible," formulated in the prologue, and also found in the main body of

the text.[61] The same again could apply to the treatment of the question of the object of memory. The latter is quickly settled in the first part of the literal commentary. The commentary just repeats Aristotle's words about memory being about "the past" and involving an awareness of one's own past cognition. It then suggests, in a short formula, that memory, as an apprehensive faculty, would be concerned with the past *thing*:

> Si enim consideratur in se, non facit memoriam; si autem ut est ymago alterius, **facit memoriam rei**, scilicet cuius est ymago (MS F, 68ra).

This could be consonant with the ideas expressed in the prologue, where memory, in its cognitive dimension as the result of the memory movement, is described as the iterated apprehension of the very thing already apprehended in the past. The author of the commentary "Quoniam ut complete", who adopts the *Sententia*'s definition of memory in the prologue, apparently has a different interpretation, seeing this definition as meaning that memory is an "apprehension of an apprehension," as we shall see below.

5.3. Cognitive Movements in a Strong Sense

In defining memory and recollection as moving faculties, the master of the *Sententia* delineated a new, *sui generis* type of movement in the case of memory and recollection.[62] The faculties of the soul here described are neither purely cognitive faculties nor locally moving faculties, following the exclusive division offered by Aristotle as an introduction to the last part of his treatise (*De anima*, 432a15–18). They involve *cognitive movements* in a strong sense, that is, in a sense in which cognition is a fully-fledged movement. They are neither alterations of the sense organ in a weak sense (an affection or an emotion), nor local movements. Rather, they are cognitively motivated cognitive movements of the soul directed to its own cognition (affection), an idea expressed nowhere else than in the *Sententia*. This idea may have been inspired, in its active dimension, by Augustine's notion of "attention" in his description of memory in the *Confessions* (*Confessions*, XI).

As "movements," memory movements are not only movements that begin "from the soul" (a feature shared with cognitively-motivated local movements of animals, movements "of the body"), but they are also are directed inwardly, to the reactivation of the soul's own past cognition. As "cognitive," cognitive move-

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61 " Primo dat modum reminiscendi in consequenter se habentibus (…) Est autem modus talis. Cum aliquod intelligibile deponitur in anima, convenit fieri reminiscencia hoc modo", *Sententia*, Parisian/Florentine redaction, MS P, fols 61vb–62ra; MS F, 68vb. The same sentence is found in the commentary "Quibusdam naturalis philosophie."

62 Probably worried by the same types of problems, the anonymous author of the commentary on the *De anima* edited by Carlos Bazán offers a different solution; he goes as far as suggesting that the faculties of memory and recollection are to be numbered *in addition* to apprehensive faculties and moving faculties, which means that they would be neither apprehensive nor moving, nor a combination of them (?), Anon., *Anonymi magistri*, ed. by Carlos Bazán, pp. 363–64.

ments are not affections beginning from the body, which would need an external impulse for being actualised, as is the case for any standard sensitive faculties. The actualisation of memory seems to stem from a voluntary reflexive movement of the soul when it targets a past cognition it wants to reactivate, an idea Albert the Great, who does not mention the notion of a focus, a *conversio* of the soul, would certainly have rejected.

The definition of memory and recollection as moving faculties and not primarily as apprehensive faculties is indeed very original, since it divides memory entirely from the senses, even the internal senses (common sense and imagination), with which it is traditionally associated; the internal senses are thus placed in another, previous part of the *De anima*, the one dedicated to apprehensive faculties as apprehensive faculties.

Even if presented by the master of the *Sententia* as an Aristotelian division, the theory clearly departs from Aristotle, who delineates only two possibilities, as already seen: the faculties of the soul are either cognitive or locally moving (432a15–18). The notion of cognition as a form of voluntary activity, even if not absent from the *De anima*, with the insistence on the notion that men can enjoy intellection "at will," for instance, is fully envisaged in the case of memory in our text.

The emphasis on the movement of memory means that the prologue of the *Sententia* addresses memory from another point of view than that of its object. The theory targets the explanation of the 'mover' of memory movements, otherwise only physiologically explained in Aristotle's treatise. The Aristotelian description probably sounded insufficient to the author of the *Sententia*, if memory and recollection were to be seriously thought of as movements, not just alterations in the sense that apprehensions are alteration movements for Aristotle. He tries to explain how the movement by which memory in actuality is obtained (that is, recall), is even begun — a question left unanswered by Adam of Bockenfield, following Aristotle himself. Adam would have judged the *Sententia*'s explanation inaccurate, since memory probably did not belong for him to voluntary movements, and was probably to be explained only on physiological grounds. Indeed, as we shall see below, memory is for Adam an affection, based on the renewed imprint of a phantasm similar to the phantasm originally imprinted when the thing was first perceived in the past.

On the contrary, the theory of the *Sententia* tends to assimilate memory to recollection, as *both* voluntary movements of the soul in quest of the reactivation of its own past cognition, in a process where those voluntary movements are enhancing bodily movements in the sensitive organ, and not the other way around. This approach is often suggested by Aristotle himself for recollection, for instance, when he lengthily describes recollection "movements," and when he defines recollection as a sort voluntary syllogism, that is, as deliberation, but the idea is extended here to memory. As interesting as the theory may appear, it is not, however, explained in great detail: it is absent from the literal part of the commentary, and only indirectly enlightened by the notion of a "focus," according to our reconstruction.

6. Memory as an Apprehensive Faculty Targeted at the Past Thing: Adam of Bockenfield and His Circle

By contrast with the *Sententia*, the commentary "In precedenti libro," by Adam of Bockenfield, is a homogeneous text, where the ideas advocated in the prologue are continuously developed in the main body of the literal commentary.

Memory and recollection are apprehensive faculties derived from sense (and not from intellection), according to the prologue. They are to be analysed, as any other cognitive faculty, starting from the consideration of their object, a topic which is at the centre of the commentary, contrary to what we find in the *Sententia*.

Adam offers then a double formulation, talking about the "object of memory" (*obiectum memoriae*) and about "what can be remembered" (*memorabile*), when commenting on the notion that memory is about "the past:"

> Declarat quid sit **memorabile** sive **obiectum memorie.**[63]

Memory happens when something is apprehended without being present, that is, when someone (in the case of human beings) knows that he has previously known either by sense or intellect, that is, when there is a new reception of what has been sensed or thought of (*intelligere*). This is the way in which Aristotle's definition of memory is reformulated, using "memorabile" (the reformulation is indicated with the words *quasi dicat*):

> Concludit diffinitionem memorie … dicens quod memoria nec est sensus nec est intellectus, sed habitus sive passio alicuius eorum cum fiat tempus. **Et dicitur "habitus" quando memorabile non est in actu memorandi, "passio" autem quando est in actu memorandi** cum fiat tempus, id est transactum sit tempus sentiendi vel intelligendi actualiter, **quasi dicat: est reacceptatio prius intellecti vel sensati.**[64]

The formulation makes it clear that memory presupposes an apprehension of a past apprehension, but it also suggests that the target of memory is the external thing *as sensed or thought of in the past*, not this very past apprehension. This can be seen in another passage, also concerned with recollection, which is a species of memory according to Adam:

> In reminiscendo aliquam **rem preteritarum** vel memorando…[65]

The distinction between the "object" of memory and "what can be remembered" is not redundant, since Adam does not use "object" here in a modern sense of the term, which is called "subject" (*subiectum*) in medieval parlance, but in one medieval sense. It is the psychological item the soul uses, the phantasm in its intentional dimension, as a likeness (*ymago*), in order to remember something else:

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63 Adam of Bockenfield, "In precedenti libro", ll. 42–43.
64 Adam of Bockenfield, "In precedenti libro", ll. 64–70 .
65 Adam of Bockenfield, "In precedenti libro", ll. 489–90 .

> Eius **obiectum** est fantasma in quantum est ymago.[66]

By contrast, the "object" in the modern sense, what memory is about, is the "external thing" (*res extra*/*res exterior*) in Adam's commentary, not the phantasm.

The movement undergone by the faculty of memory when it actually recalls is an affection. It is triggered by a species or a phantasm that is distinct from the one preserved in imagination, the former being a "similitude" of the first imprinted phantasm:

> Sed virtus memorativa ab ipso fantasmate movetur, in quantum scilicet est **similitudo speciei preaccepte in sensu vel fantasmatis** prius oblati intellectui.[67]

The idea is not very clear, but it seems likely that the affection undergone by the bodily organ of memory when memory passes from potentiality to actuality (that is, when something is recalled) would be like a new movement of imprinting over an already existing imprint, as if one were to apply a seal over a mark in the wax already left with the very same form.

The physiological condition, that is, the movement whereby the mark is reactivated, is then the basis of the cognitive action of the soul, which consists in considering the phantasm so reactivated as a likeness of something else, rather than in itself. Otherwise, the process would just leave us with an imaginative act, a reverie by which we contemplate our own internal phantasms, with no reference to the external world from which they originally came. Memory is a cognition of the external thing because it sees the phantasm as a similitude of the external thing:

> In quantum est fantasma, consideratur prout est aliquid in se: sic dicitur "fantasma" et est eius **ymaginatio** sive speculatio. Si vero consideretur in quantum est **alterius agentis** existentis extra animam, sic est ymago, et sic est memoria. Quare, cum fanstama movet actualiter animam in quantum est aliquid in se, tunc **dicitur iste motus "ymaginatio".** [68]
>
> Motus sensibilis factus in sensu representat sensibile, sicut et forma sigilli impressa in cera representat sigillum. Quare, **cum memoria representet anime rem extra**, necesse est prius aliquam passionem sive similitudinem illius mediante sensu imprimi in anima …[69]

The ideas of Adam on memory are synthetised perfectly in the last paragraph of the commentary on the first part of the treatise:

> Et nota quod fantasma dicitur **"habitus"** in quantum est **quiescens in anima**; dicitur autem **"passio"** in quantum est **movens eam in actu**; dicitur et "species" in quantum aliquid manifestatur fantasmate; **"fantasma"** vero in quantum actu

66 Adam of Bockenfield, "In precedenti libro", l. 313.
67 Adam of Bockenfield, "In precedenti libro", ll. 138–40.
68 Adam of Bockenfield, "In precedenti libro", ll. 257–61.
69 Adam of Bockenfield, "In precedenti libro", ll. 186–89.

> apprehenditur et facit **aliquid actu apparere**; **"ymago" et "similitudo" in comparatione ad rem extra**.
> Et ita **memoria incipit a fantasmate, quasi dicat: est habitus**. Est tamen **in quantum est passio et ymago rei exterioris.**[70]

In the subsequent English tradition, the author of the commentary "Quibusdam naturalis philosophie" offers a compromise, reflecting the compromise already articulated as a solution in his prologue: he says that memory is both a faculty of apprehending the past (following Adam of Bockenfield) and a moving faculty (following the *Sententia*):

> Determinat quid est memoria, intendens quod memoria est **virtus apprehensiva rei preterite et anime motiva** ad preteritum preacceptum comprehendendum.[71]

As seen, he also takes over the *Sententia*'s notion of a focus:

> Si mediante sensu recipitur aliqua passio in anima [...] **convertat se anima ad illam passionem speculando ipsam virtute memorativa, aut igitur est memoria ipsius passionis presencialiter speculate, aut ipsius rei a qua ortum habuit** huiusmodi passio.[72]

By contrast, the author of the commentary "Quoniam ut complete" does not talk about moving faculties in the main body of the literal commentary, though he obviously thinks that the way he describes the object of memory is a coherent development of the ideas set forth in the prologue, where he makes a reference to his forthcoming explanation, as seen in the above table ("ut infra patebit"). The description of memory as an "apprehension of an apprehension" is probably for him the best way to explain the apprehension gained by the memory movement as targeted at the reiteration of a cognition. He understands Aristotle's theory in a way opposite to that of Adam: the object of memory is the past apprehension, memory is an apprehension of an apprehension, and it targets the past object only through the past apprehension. The past apprehension is not merely the condition for there being a memory of a past external thing, but the very object of memory, leading, when known as such (that is, as a past cognition), to knowledge about the external world known in the past:

> Memoria est **apprehensiva apprehensionis preterite** eiusdem memorantis, sive apprehensio preteriti, cum anima apprehendit se prius apprehendisse illud. [...]
> Est memoria in actu cum anima comprehendit se prius apprehendisse illud preteritum.[73]

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70 Adam of Bockenfield, "In precedenti libro", ll. 318–24.
71 Anon., "Quibusdam naturalis philosophie", ll. 35–36.
72 Anon., "Quibusdam naturalis philosophie", ll. 139, 143.
73 Anon., "Quoniam ut complete", ll. 68–74

These passages are even clearer:

> Memoria est apprehensiva preteriti, hic ostendit quod hoc est **inquantum est apprehensiva apprehensionis preterite de illo preterito.**[74]
> Memoria **in actu est apprehensiva apprehensionis** preterite.[75]

Contrary to Adam of Bockenfield, the anonymous commentator doesn't distinguish between what can be remembered (*memorabile*) and the object of memory (*obiectum memorie*); the two expressions are treated as equivalent throughout the commentary, with an understated distinction between the immediate object of memory (past apprehension of the past) and a mediate object (the past reality apprehended in the past).

Here is the way in which Aristotle's definition of memory as a *habitus* or an affection is explained:

> Quod etiam sit habitus aut passio alicuius istorum, similiter patet per hoc quod **memoria est apprehensionis preterite.** Quare oportet ut sit habitus aut passio alicuius virtutis secundum quam fiebat illa apprehensio preterita.[76]

The mediation of cognition of the past by a cognition of one's own past cognition is so central to the point that the anonymous commentator says that a direct cognition of the past not mediated by a cognition of one's own past cognition would be only an act of imagination, a sort of reverie on the past, as already mentioned:

> Virtus apprehensiva, apprehendens **aliquod preteritum solum, ita quod non apprehensionem illius, non est alia a virtute ymaginativa**. Cum igitur memoria non sit virtus ymaginativa, sed superior ipsa, **non solum apprehendit aliquod preteritum, sed apprehendit se vidisse aut intellexisse illud prius.**[77]

For the anonymous commentator, the movement of the soul by which memory is actualised does not depend on a new numerically distinct, but similar phantasm imprinted again in the soul, as was the case for Adam of Bockenfield. It seems rather to depend, as in the *Sententia*, on a focalising movement of the soul by which it "converts" itself to the consideration of one of the preserved phantasms, which is thus activated:

> Si accidit circa memoriam, ut predictum est, quod passiones fiunt in anima per sensum, que ortum habent ab ipsis sensibus, tunc est dubium utrum fiat memoria **cum anima convertit se super passionem presencialiter existentem in anima**, aut fiat memoria rei extra a qua habuit illa passio originem.[78]

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74 Anon., "Quoniam ut complete", ll. 100–1.
75 Anon., "Quoniam ut complete", ll. 105–6.
76 Anon., "Quoniam ut complete", ll. 118–19.
77 Anon., "Quoniam ut complete", ll. 107–11.
78 Anon., "Quoniam ut complete", ll. 272–76.

7. Conclusion

On the basis of a shared (probably considered as 'obvious') definition of memory as recall, an iterated apprehension of something already apprehended, the commentators here studied offered a variety of approaches and theories. They debated about the question whether "the past" in Aristotle's text means past realities or past cognitions; they reflected about the kind of acts performed by the soul and about their relationship to bodily affections. They were faced with the existence of common explanations of both memory and recollection which were not always easy to fit into their general interpretation of the text, where the two faculties were often sharply distinguished.

The early English commentaries offered a series of original insights developed within the boundaries of what they probably conceived as an 'Aristotelian' reading of the *De memoria*, where the main notions of Arabic psychology were avoided, especially intentions. This turned all the emphasis upon the soul's various possible ways of considering the very same phantasm. It led to a troubling description of imagination as a sort of 'reverie', but also, in Adam of Bockenfield's text, to a possible distinction between the external object (the "subject" in medieval parlance), that is the external past thing, and the 'mental object' (the "object" in medieval parlance) of memory. The prologue of the *Sententia*, on the other hand, offered an innovative psychological framework where memory movements could be inserted into a general theory of psychological movement, as inward movements of the soul, not only psychologically started, as are also local movements, but also psychologically targeted. This framework, however, does not anticipate some sort of 'natural history' of cognitive movements, based on a reduction of the latter to standard 'physical' movements, since memory and recollection movements "of the soul" are strongly contrasted with local movements "of the body." Rather, the theory suggests an extension of Aristotle's analysis of the soul as a moving principle to the analysis of some of the operations of the soul as a principle of cognition, where a *sui generis* type of movement is involved, namely cognitive movements in a strong sense. These are movements of the soul concerned with the management of its already-acquired cognition.

In an age when natural philosophy as a systematic discipline was still in the making, Aristotle's *libri naturales* were in the process of being fully appreciated, the Latin texts were often tricky, and when a coherent curriculum in Arts was probably not yet fully established in Oxford, there was a lot of uncertainty: concerning the very location of memory and recollection in the (often non-Aristotelian) classifications of the powers of the soul, and concerning the place to be given to the *De memoria* within a not-yet-systematised Aristotelian corpus. Many ideas we would judge alien to Aristotle's theory, such as the definition of memory as recall of something forgotten, of imagination as a 'reverie', or of memory and recollection as moving faculties, grounded in the exegesis of the *De anima* as they partially were, could appear at least as 'Aristotelian' as any other interpretation. The study of the endeavours of the early English commentators thus offers a further illustration of the historical varieties of 'Aristotelian' doctrines in the 'Aristotelian' traditions.

VÉRONIQUE DECAIX

What Is Memory of?

*Albert the Great on the Proper Object of Memory**

1. Introduction

In his *Remarks on Philosophy of Psychology*, Wittgenstein criticises a common theory describing memory according to which memory is the storing of images from the past. He identifies three constitutive aspects of this theory: a) memory depends on a trace or imprint, b) the trace or imprint is linked to an experience, and c) the trace or imprint is linked to a 'feeling of pastness.' In a sense, Wittgenstein's critique may target Aristotle's definition of memory. Indeed, in the *De memoria and reminiscentia*, Aristotle enquires into the nature of memory by asking three preliminary questions:

> In discussing memory and remembering, it is necessary to say what they are, and how their occurrence is to be explained, and to which part of the soul this affection, and recollecting belong.[1]

Then Aristotle defines memory as an imprint (*tùpos*) caused by a previous sensation, from which the subject forms an image, linked to 'a feeling of pastness' (*aisthetis tou kronou*).[2] Aristotle's method investigates the causes (*aitiai*) of the process of

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1 Aristotle, *On Memory and Recollection*, transl. by Richard Sorabji (Bristol: Bristol Classical Press, 2012), p. 47.

2 *De mem.*, 1 451a14–17, transl. Richard Sorabji, p. 52: "Now it has been said what memory and remembering are, namely having of an image regarded as a copy of that of which it is an image, and to which part in us memory belongs, namely the primary perceptive part and that with which we percieve time."

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remembering. As a power common to body and soul, or a shared function, memory, which is characterised as a *dynamis*, that is, a capacity, can be actualised by its proper content. Memory depends on the part of the soul able to perceive time: that which we remember is something that has been sensed in the past (*proaisthanesthai*). The object of memory thus derives from imagination, since that which remains from the past sensation is described as a kind of image. However, the question of the proper object of memory remains problematic and is tackled in depth in the Latin Middle Ages. In this paper, I will argue, following Albert the Great's literal commentary on *De memoria and reminiscentia*, that the difference between a mere image and a reminder is grounded in a structural intrinsic component that imparts to the object of memory its ontological distinctness from a mere image.

The first issue comes from this explanation of the affection produced by a past sensation in pictorial terms. Remembering is described as a viewing (νοῆσαι) of an image:

> For this is clear that one must think of the affection, which is produced by means of perception in the soul and in that part of the body which contains the soul, as being like as a sort of picture, the having of which we say is memory.[3]

The affection, the memory-token, is described as a kind of picture (ζωγράφημά τι), leading to several questions. One of these questions is 'How could we ever distinguish a memory-image from an imagination-image?' This distinction is of special importance in the case of creative imagination during sleep and day-dreaming. The possibility of false memories is exemplified by Aristotle with the case of Antipheros of Creos.[4] To avoid the risk of delusion, the reality of the reference of memory has to be guaranteed. This is particularly difficult insofar as the image is of the past, that is, precisely of something that does not exist any longer. This leads to a second main issue also indicated in Wittgenstein's critique: if this feeling of pastness is actually present to the soul when I remember something, how could memory ever relate to the past? How could we infer from a present experience to the past? If we conceive memory as a present feeling of pastness, the subject is limited to his own experience insofar as only the present feeling is real, whereas its representative content remains uncertain. The cognitive subject is locked up in what Wittgenstein calls the 'solipsism of the present moment' (TLP, 5.6–5.641): if memory is defined as a past experience, it follows that we need to be able to recognise the reference of our memory (that which we are remembering) in order to differentiate it from a mere image. Aristotle was perfectly aware of this issue, which he formulated in a well-known aporia:[5] how can we maintain that memory is of a past image if, when one actually remembers,

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3 Aristotle, *De mem.*, 1 450a27–32, p. 50.

4 Aristotle, *De mem.*, 451a8-a12.

5 *De mem.*, I, 450a25–450b15, transl. Richard Sorabji, p. 50: "One might be puzzled how, when the affection is present but the thing is absent, what is not present is ever remembered (…) But then, if this is the sort of thing that happens with memory, does one remember this affection, or the thing from which is what produced? For the former, we would remember nothing absent; but if the latter, how is it that while perceiving the affection we remember the absent thing which we are not perceiving?"

the image is actually present in the mind? Moreover, if we agree that one remembers the past things themselves, how can the soul ever refer to something that does not exist any longer?

This article will show how this subject was debated during the Middle Ages. Medieval authors such as Albert the Great, Thomas Aquinas, Radulphus Brito, John of Jandun, and John Buridan, dealt with the difficult question of the proper object of memory in their commentaries.[6] Among these authors, Albert the Great is of special importance because he discussed this question quite early, with the result that that the solution he gave to the aporia regarding the pastness of the object of memory became canonical afterwards. Indeed, Albert the Great gives two different accounts of the matter: the first is in the *Summa de homine* (1242), qu. 40, where the question 'What is the object of memory' appears (*quid sit objectum memoriae*?),[7] and the second is in his literal commentary on *De memoria et reminiscentia*, in chapter 2, where he asks 'what are memories,' and in chapter 4 where he inquires 'whether memory is of the past.'[8] His conception is important since, while answering these questions, Albert sets the ground for a new ontology of the object of memory that distinguishes it from the object of imagination. In the first part of this article, I will explain why the object of memory is a more problematic issue for Albert the Great, and more generally for scholars in the Latin Middle Ages, than it is was for Aristotle. Then I will elucidate two crucial distinctions between an image and a memory introduced in Albert's works. The first, the subjective distinction, relies on physiological grounds. The second, the objective distinction, is described as a twofold consideration. In this process, we will challenge this interpretation that reduces the difference between an image and a reminder to a mere 'shift of gaze.'

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6 Cf. Peter of Auvergne, *Quaestiones disputatae super Librum de Memoria et Reminiscentia*, ed. by Kevin White, in "Two Studies Related to St Thomas Aquinas' Commentary on Aristotle's *De sensu et sensato* together with an Edition of Peter of Auvergne's *Quaestiones super parva naturalia*" (unpublished doctoral thesis, University of Ottawa, 1986): qu. 4: "Utrum memoria sit praeteritorum solum;" Thomas Aquinas, *Sentencia libri De sensu et sensato cuius secundus tractatus est De memoria et reminiscentia*, in *Sancti Thomae de Aquino Opera omnia*, vol. 45/2, ed. by René Antoine Gauthier, Cura et studio Fratrum Praedicatorum (Rome – Paris: Commissio Leonina – Vrin, 1985), tract. 2, *De memoria et reminiscentia*, Lectio 1 and 2: "Primo inquirit quid sit objectum memoriae;" Radulphus Brito, *Quaestiones de memoria et reminiscentia*, ed. by Sten Ebbesen, in "Radulphus Brito on Memory and Dreams. An Edition," *Cahiers de l'Institut du Moyen-Âge grec et latin*, 85 (2016), pp. 11–86, art. 3: "Utrum objectum memoriae sit aliquid praeteritum." See the list of questions on the *De memoria*, in Sten Ebbesen, Christina Thomsen Thörnqvist, and Véronique Decaix, "Questions on *De sensu et sensato, De memoria* and *De somno et vigilia*. A Catalogue," *Bulletin de Philosophie Médiévale*, 57 (2015), pp. 59–115 (pp. 88–96). Cf. Ebbesen's contribution in this volume.

7 Albertus Magnus, *Summa de creaturis, Secunda pars, id est de homine*, in *Alberti Magni Opera omnia 27/2*, ed. Henryk Anzulewicz and Joachim R. Söder (Münster: Aschendorff, 2008), on the datation, see pp. XIV-XV., qu. XL, art. 2: "Quid sit objectum memoriae?."

8 Albertus Magnus, *De memoria et reminiscentia*, in *Opera omnia*, vol. VII, IIA, ed. by Silvia Donati (Münster: Aschendorff, 2017), tract. 1, cap. 2: "Quae vere sint memorabilia" (p. 115 sq), cap. 4 "De solutione dubitationis quae ortum habuit ex hoc quod dictum est, memoriam esse praeteriti" (p. 119 sq). For the discussion about the datation, see Donati "Einleitung" (2017), p. XXIV-XXVI, in which she determines that the paraphrase was written as Albert the Great was Provincial of Teutonia, therefore "wahrscheinlicher zwischen etwa 1255 und 1256 – 1257" (p. XXVI).

2. The Object of Memory in the Context of the Classification of the Internal Senses

To understand why the object of memory became a problematic issue during the Latin Middle Ages, we need to take a step backwards. First, it is worth emphasising that Medieval authors were deeply influenced by the theory of the soul developed by thinkers in the Arabic Tradition such as Avicenna and Averroes.[9] Latin thinkers inherited the innovations they had introduced into Aristotelian psychology, such as the definition and systematisation of the internal senses. Indeed, Avicenna and Averroes' influence on Albert's conception of memory is manifested in the fact that his commentary begins with an introductory digression in which he gives a summary of their views and discusses briefly their divergences, taking either one side or the other, especially on the function of the cogitative power.[10] His confidence in their thought is so great that he uses their works to emend opinions of his contemporaries who have fallen into error because of "the obscurity of Aristotle's words."[11] The importance of the Arabic philosophers for his theory can be seen with respect to three aspects.

First, Albert the Great takes up the two Avicennian organisational criteria for classification of the internal senses: (1) the distinction according to capacity between apprehension and conservation,[12] and (2) the distinction according to object between sensible forms and intentions. Intentions are un-sensed forms, or sensible forms that cannot be perceived by the five external senses, famously exemplified by the hostility apprehended by a sheep in a wolf. Even though Albert's classification is close to Avicenna's, he introduces an important change. While Avicenna posits five internal senses,[13] Albert reduces them to four:[14] common sense (*sensus communis*),

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9 Henryk Anzulewicz, "Memoria und reminiscentia bei Albertus Magnus," in *La mémoire du temps au Moyen Âge*, ed. Agostino Paravicini Bagliani (Firenze: SISMEL – Edizioni del Galluzzo, 2005), pp. 163–200.

10 Albertus Magnus, *De mem.*, cap. 1, p. 113: "Et est digressio declarans sententiam Avicennae et Averrois de memoria."

11 Albertus Magnus, *De mem*, cap. 1, p. 113: "Quia autem, mihi videtur, omnes fere aberraverunt Latini in cognitione harum virtutuum quas memoriam et reminiscentiam appellamus, ut aestimo propter verborum Aristotelis obscuritatem, ideo primo volumus ponere planam de memoria sententiam Peripateticorum, antequam Aristotelis sententiam prosequamur."

12 Albertus Magnus, *De mem.*, cap. 1, p. 113: "Impossible est quod eiusdem potentiae organicae sit bene recipere and bene conservare."

13 Cf. Avicenna, *De anima*, I, 5, in *Liber de anima seu sextus de naturalibus I–II-III*, ed. by Simone van Riet, with an introduction by Gérard Verbeke (Louvain – Leiden: E. Peeters – E. J. Brill, 1972;, p. 79 (cf. George P. Klubertanz, *The Discursive Power: Sources and Doctrine of the vis cogitativa according to Saint Thomas Aquinas* (Carthagena: Messenger, 1952), pp. 21–22); Avicenna, *De anima*, IV, 1–3, in *Liber de anima seu sextus de naturalibus IV–V*, ed. by Simone Van Riet with an introduction by Gérard Verbeke (Louvain – Leiden: E. Peeters – E. J. Brill, 1968 (cf. Klubertanz, pp. 82–93). Although Avicenna gave several classifications of the internal senses, medieval authors were mainly influenced by those two passages. For a more sophisticated account of this issue, see Tommaso Alpina's contribution in this volume.

14 Nicholas H. Steneck, "Albert the Great on the Classification and Localization of the Internal Senses" *Isis*, 65 (1974), pp. 193–211, and Nicholas H. Steneck, "Albert on the Psychology of Sense Perception," in *Albertus Magnus and the Sciences. Commemorative Essays*, ed. by James A. Weisheipl (Toronto: Pontifical

imagination (*imaginatio*), the estimative power (*estimativa*) and memory (*memoria*). The first internal sense is the common sense whose function is to perceive sensible forms first received by the external senses.[15] The second internal sense, imagination, is able to preserve these forms.[16] Here, Albert takes the side of Averroes against Avicenna, holding that the function of imagination is not to combine images (as in Avicenna's imaginative power, also called the cogitative faculty in humans). Rather, imagination is merely a retentive power.[17] The third internal sense divides intentions from their associated images and from one another.[18] Following the Avicennian terminology, Albert prefers to call this particular power 'estimative' rather than using Averroes' term 'cogitative.' In arbitrating the opposition between Avicenna and Averroes on the role of imagination and of the estimative power, Albert uses an organising principle of apprehension vs conservation: imagination's role is to conserve images, while the estimative power is able to divide an intention from its image, and from other intentions. Albert attributes to the estimative power the role that Avicenna gives to the imaginative (or cogitative) power, an arrangement which sustains his parsimonious division but which is not without its own problems, as we shall see. Finally, the fourth and last internal sense, memory, is defined as a power of conservation.

The second aspect derived from the Arabic sources regards the localisation of the internal senses: common sense and imagination are situated in the front ventricle of the brain, while the estimative power is in the middle, and memory is in the posterior

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Institute of Mediaeval Studies, 1980), pp. 263–90. Even though Albert gives several classifications of the internal senses in his works, for instance in his *Summa de homine* (I, 39, 1; I, 42, 2) and his *Commentary on the De anima*, shifting between a fivefold and a fourfold system, we restrict our study to the one given in his commentary on the *De memoria*. For a more detailed analysis on the systematisation and localisation of the internal senses in Albert the Great, see Klubertanz; Harry A. Wolfson, "The Internal Senses in Latin, Arabic and Hebrew Philosophical Texts," *The Harvard Theological Review*, 28 (1935), pp. 69–133; Nicholas Steneck, "Albert on the Psychology of Sense Perception;" and Jörg Alejandro Tellkamp, "Albert the Great on Structure & Function of the Inner Senses," in *The Judeo-Christina-Islamic Heritage. Philosophical and Theological Perspectives*, ed. by Richard C. Taylor and Irfan A. Omar (Milwaukee: Marquette University Press, 2012), pp. 305–21. Note that in these articles the commentary on the *De memoria* is often overlooked.

15 Albertus Magnus, *De mem.*, cap. 1, p. 113: "Cum autem dicimus quod rememoramur ex eo quod est apud animam, oporter necessario duas precedere operationes. Quarum una est esse receptum hoc a quo memoria incipit; et haec est operatio sensus communis."

16 Albertus Magnus, *De mem.*, cap. 1, p. 113: "Hanc conservantem Avicenna quidem vocat formalem et non imaginativam. Averroes autem in huius libri commento vocat eam conservantem et non imaginativam vel formalem."

17 Albertus Magnus, *De mem.*, cap. 1, p. 113: "conservans non est nisi retinens formas in se depictas."

18 Albertus Magnus, *De mem.*, cap. 1, pp. 113–14: "Sed distinctam rei cognitionem operatur in anima quando cognoscitur quod haec figura huius rei et non alterius intentio est. Oportet igitur quod ante memoriam quaedam virtus operetur quae ex ipsa figura elicit rerum intentiones singulares. Et hanc quidem bene et proprie vocavit Avicenna aestimationem. Averroes autem improprie vocat cogitivam animalium brutorum, per quam fugiunt nociva et prosequuntur convenientia."

part.[19] The explanation underlying their localisation is anatomical, showing the influence of Galenic and of Arabic medicine in Albert's philosophical psychology.[20]

The third view regards the question of the precise object of memory: even though Albert takes up the Latin translation of the Arabic term *maʿnā* (*intentio*), he does not follow the Avicennian definition of memory as a storehouse of intentions.[21] Here again, Albert departs from his predecessor: memory is certainly a conservative power, but it encompasses both images and intentions.[22] This view is a result of Albert's above-mentioned synthesis of the activities of the imaginative and estimative powers. Since Albert conflates the roles devoted to the Avicennian imaginative and Averroist cogitative powers under the name 'estimative power,' the strict division between sensible forms and intentions no longer stands.[23] The estimative power is characterised as a distinguishing cognitive power, able to separate an intention from its proper image and to distinguish this precise intention from another one. Since the estimative faculty has to deal with images and intentions, its correlative power of conservation, memory, has to preserve both of them. A main argument in support of this claim comes from the case memory in animals: superior animals, able to sense time, such as livestock, can find their way back to shelter after a day in pasture, which shows their capacity to retain images and their capacity for memory.[24] Consequently, the Avicennian principle of organisation through the proper object, an object that can only be perceived by its corresponding faculty, no longer stands. Albert's classification encounters a problem: if imagination and memory are both conservative powers concerned with images, on what grounds may we still differentiate them? How is it possible to distinguish a mere image from a memory?

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19 Albertus Magnus, *De mem.*, cap. 1, p. 114: "Quod autem quinque ista loca in capite distincta sint ab actionibus probat Averroes concorditer cum Avicenna dicentes quod receptio sensus communis et imaginatio sunt in anteriori parte cerebri, cogitatio sive distinctio in medio et conservatio et memoria in posteriori."

20 Albertus Magnus, *De mem.*, cap. 1, p. 114: "Et ideo laesa posteriori parte inducitur oblivio et manet cogitatio et distinctio et imaginatio et sensibilium acceptio. Laesa autem media remanent anteriores et posteriores secundum suum modum et debilitatur media. Et laesa priori aufertur operatio primae et remanent media et posterior secundum suum modum". On the importance of the Avicennian medical tradition in the philosophical debates on memory, cf. Chandelier's contribution to this volume.

21 Avicenna, *De anima*, I, 5 (ed. van Riet, p. 86.; pp. 89–90.): "Vis memorialis et reminiscibilis, quae est vis ordinata in posteriori concavitate cerebri, retinens quod apprehendit vis aestimationis de intentionibus non sensatis singulorum sensibilium;" *Ibid.*, IV, 1 (p. 6. l. 79–80, p. 7. l. 87–88, p. 8. l. 2–5, p. 9. l. 8–12).

22 Albertus Magnus, *De mem.*, cap. 1, p. 114: "Cum memoria habeat utrumque istorum oportet in ipsa esse depictas figuras et intentiones."

23 Avicenna, *De anima*, IV, 1, pp. 8–9: "Usus autem est ut id quod apprehendit sensus, vocetur forma et quod apprehendit aestimatio, vocetur intentio. Sed unaquaeque istarum habet thesaurum suum. Thesaurus autem eius quod apprehendit sensus est virtus imaginativa, cuis locus est anterior pars cerebri: unde cum contingit in ea infirmitas, corrumpitur hic modus formalis, aut ex imaginatione formarum quae non sunt, aut quia difficile est ei stabilire id quod est in illa. Thesaurus vero apprehendentis intentionem est virtus custoditiva, cuius locus est posterior pars cerebri, et ideo cim contingit ibi infirmitas, corrumpitur id cuius proprium est custodire has intentiones."

24 Albertus Magnus, *De mem.*, cap. 2, p. 117: "et sic sentitur in praeterito quando res praeteriit, sicut oves et caprae revertuntur ad caulas cognoscentes caulas ubi habitaverunt in praeterito."

Albert offers two ways to disambiguate these powers of the soul: memory and imagination are distinguished *secundum subiectum*, according to their subject, and, *secundum objectum*, according to their object.

3. The Subjective Division of Imagination and Memory: A Physiological Distinction

First, Albert the Great distinguishes imagination and memory according to their subject. Imagination and memory are separated according to the differing locations of these potencies. Even though Albert the Great finds the localisation in five cerebral ventricles 'elegant,' he prefers a threefold division: common sense and imagination are in the front ventricle, estimation in the middle, and memory in the posterior part of the brain. Yet he follows Averroes in maintaining a physiological division of imagination (a power of conservation of images) and memory (a power of conservation of intentions). There are several arguments in favour of this division according to subject, which is also a division *secundum esse*.[25] First, he gives a zoological argument: if imagination shared the same localisation as memory, all animals capable of sensation would be able to remember, which is not the case, for instance, for oysters or worms.[26]

The second reason is physiological and relies on the organic nature of the powers' proper organs. Albert gives a physical explanation of the function of the powers of the soul. As organic faculties, their ability to perform a function depends on the elemental constitution of the subject in which they inhere. This dependence is demonstrated by the variation of memory according to the quality of an organ that may be affected by an accidental disability (such as apoplexy, paralysis or lethargy), or structurally by age (in the case of extreme youth or old age), or by an excess of some humour (in the melancholic character, for example).[27] To carry out its conservative function properly, memory should be located in the posterior ventricle of the brain, since it must be conditioned by two qualities: coldness and dryness.[28] Indeed, just as a substance in flux cannot capture the form of a seal, an abundance of fluid (as in the case of a

25 Albertus Magnus, *De mem.*, cap. 1, p. 114: "Ex his igitur conservativa secundum Averroem non differt a memoriali nisi secundum esse."

26 Albertus Magnus, *De mem.*, cap. 1, p. 115: "Et si esset sensus communis et memoriae idem organum, tunc omnia habentia sensum communem haberent memoriam, quod falsum est, quoniam vermes et conchae memoriam non habent."

27 Albertus Magnus, *De mem.*, cap. 4, pp. 120–21: "Quod autem talis impressio a sensibili relinquatur in partibus animae sensibilis et maneat probatur ex ipsis dispositionibus potentiarum receptivarum, secundum quarum variationem varietur enim memoria, quod non esset nisi sigillata memoria intelligeretur. Videmus enim quod in his quorum complexio fluxibilis est multum, sive hoc sit propter infirmitatem, sicut est apoplecticis quibusdam et paralyticis et lethargicis, sive hoc sit propter aetatem, iuventem infantilem scilicet et decrepitam senectutem, illis non bene accidit memorari."

28 Albertus Magnus, *De homine*, qu. LX, art. 3, p. 349: "Videt quod memoria magis debeat esse in postrema parte: quia illa superior et siccior est et frigidior, et vis retentiva confortatur frigido and sicco."

youth or a melancholic) renders the organ unable to retain images.[29] And as we see with bodies in states of putrefaction, or with monuments in states of ruin, too much moisture (as in old age) leads to the corruption of their forms.[30] On the contrary, imagination should be close to common sense, whose ability to perceive requires a warm and moist environment. Albert stresses a distinction between the sensible form (*forma*), which is received by the common sense without matter, and the image (*figura*), understood as a kind of imprint left in the imagination in the absence of the object. Therefore, imagination should be posited in the first cerebral cavity, just behind the common sense, so as to be able to retain an image thanks to its dryness and hardness, and thereby transfer the sensible form into a more solid medium.[31]

So memory and imagination are organically and locally distinct according to the physical constitution of their substrate (*secundum subiectum*).[32] Averroes' influence is evident insofar as memory is said to have the most spiritual organ,[33] so that imagination and memory are distinct according to their degree of spirituality, that is, of abstraction. But this real distinction between imagination and memory is not enough to disambiguate their object, since memory also preserves images. Therefore, we need to take a look at Albert's second answer: imagination and memory are distinct according to their object (*secundum obiectum*).

4. The Objective Distinction of Imagination and Memory: A Twofold Consideration?

If when one remembers, one is currently aware of an image, how can we differentiate a mere image from a memory? In order to solve this Aristotelian aporia, Albert the Great gives another account of the object of memory in the fourth chapter of his literal commentary, labelled the twofold consideration (*duplex consideratio*):[34]

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29 Albertus Magnus, *De mem.*, cap. 4, p. 121: "In infantibus enim nimis abundant umidum augens et radicale, in decrepitis autem abundant umidum humectans non augens, quod est phlegmaticum, propter quod non bene retinent sigillata a sensibus, quoniam propter frigidum cerebrum praecipue humiditas habent dominatur in capite illorum qui in aliqua istarum umiditatum habent abundantiam."

30 Albertus Magnus, *De mem.*, cap. 4, p. 121: "Et fit in eis sicut in ruinosis aedificiis, in quibus non fit sigillatio propter putrefactionem istorum."

31 Albertus Magnus, *De homine*, qu. 38, art. 3, p. 328: "Dicendum cum Auctoribus, quod in prima parte cerebri est organum imaginationis: sed prima pars dividitur in tres partes, scilicet in illam quae propinquissime conjungitur organis sensuum, et ad quam immediate recurrunt nervi sensibiles, et in illa est organum sensus communis: et in illam partem quae est post illam in medio, quae que non abundat sic in humido, sed est aliquantulum terminata per siccum: et in illa parte est organum imaginationis, cuius est retinere formas re non praesente, et hoc virtute sicco terminantis humidum. In postrema vero parte primae est phantasia et aestimatio, ut patebit inferius."

32 Albertus Magnus, *De mem.*, cap. 1, p. 114: "Ex his igitur patet quod conservativa secundum Averroem non differt a memoriali nisi secundum esse, quia scilicet conservativa conservat tam imagines quam intentiones, sed memoria componendo ista duo refertur ad res extra per ipsas."

33 Albertus Magnus, *De mem.*, cap. 1, p. 114: "Quintus est in organo virtus memorativa et ille locus est magis spiritualis inter omnes."

34 Albertus Magnus, *De mem.*, cap. 4, p. 122: "propter istam eandem causam duplicis considerationis."

> For that which is in memory as an appearance and a picture happens to have many ways. This is stated in the following manner, because just as an animal painted on a tablet is indeed a painted animal and an image imitating that of which it is a representation, and in substance this is in fact one and the same, but in its being is not one and the same, inasmuch as it is taken in absolutely in the first instance and is received by comparison to another in the second. For this reason it can be considered as a painted animal and it can be considered as a representational image. Thus too it is appropriate to scrutinise a mental image formed in us.[35]

Following Aristotle, Albert the Great distinguishes two ways in which the soul may consider an image. On one hand, an image may be taken in itself, absolutely, and be viewed *per se* (for example, as the painting of animal, e.g. a painted horse). On the other hand, the image may be taken in relation to something else (*comparate ad alterum*), in reference to what it is supposed to represent (e.g. a painting of Bucephalus). In the first case, we are in the presence of a picture considered in itself, in the second, of a likeness taken in comparison to the real thing that it is supposed to picture. Albert the Great stresses this objective difference in lexical terms: a likeness, which is an imitation of something else, is called an image in the proper sense (*imago*), i.e. that which constitutes a memory (*memoratio*), as opposed to a mere image (*figura*).[36] Yet this twofold consideration may be understood in two ways: as a shift in the gaze of the soul or as a constitutive act of memory that gives rise to its proper object. The first line of interpretation, endorsed by David Bloch, will be challenged afterwards by a few arguments in favour of a formal and structural distinction between the objects of imagination and of memory.

4.1. First Interpretation: The Shift in the Gaze of the Soul

In his book *Aristotle on Memory*, David Bloch explains the Albertinian twofold consideration in the following terms:

> Albert is even terminologically clearer than Aristotle. The image, he says, can have different modes (*modi*) and this, he says, means that the image is one and

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35 Albertus Magnus, *De mem.*, cap. 4, p. 122: "Quod enim est in memoria sicut species et pictura quaedam contingens et accidens est multos habere modos. Quod sic declaratur, quia sicut in tabula pictum animal est quidem animal pictum et imago imitans id cuius est representativum, et in substantia quidem est hoc unum et idem, sed non suum esse unum et idem, quia primo modo accipitur absolute et secundo modo accipitur comparate ad alterum, et ideo potest considerari sicut animal pictum et potest considerari sicut imago representans, sic et in nobis phantasma factum potest esse rimari," English translation (with changes) borrowed from Jan M. Ziolkowski, in Mary J. Carruthers and Jan M. Ziolkowski, *The Medieval Craft of Memory. An Anthology of Texts and Pictures* (Philadelphia: University of Pennsylvania Press, 2002), p. 134.

36 Albertus Magnus, *De mem.*, cap. 4, p. 120: "Et hoc est sicut figura quaedam vel alius motus sensibilis gustus vel odoratus, sicut sigillantis anuli qui in cera reliquit signum sine materia;" p. 122: "Si autem ad rem a qua acceptum fuit referatur per propria rei illius, tunc vocatur imago, quasi imitago dicta, et hoc modo perficit memoriam."

> the same. The difference between the image present in memory and imagination is that one can consider it under the two aspects mentioned; Albert refers to these aspects as a *duplex consideratio*. So, Albert has seen, more clearly than most interpreters, that the crucial element in memory is the *modus spectandi*, not the ontology of the image.[37]

This reading is based on the above-mentioned passage where Albert the Great distinguishes two modes in which the soul may speculate on the very same image: in itself (*per se*), absolutely (*absolute*), or with respect to something else, relatively (*relative*). Bloch's interpretation is that the difference between a mere image and a memory relies upon a shift in the gaze of the cognitive subject considering what is in itself the very same item. In one case, it is a picture. In the other case, when considered in relation to something else, it is a memory (*memoratio*).[38] The example given by Albert is the following: the soul may speculate on an image in itself, as when seeing the image of a barber, or it may relate that image to the person depicted in the picture, for instance by recognising Socrates, the son of Diares. In each case it is the very same image, seen absolutely as a picture, or relatively as a likeness, a memory.[39] So the distinction between a picture and a memory depends on the way of viewing the same image and relies upon the cognitive subject, the viewer. Although this solution is very close to Aristotle's solution, I argue that it does not fully encompass Albert's conception. On the contrary, I will argue that a change in the gaze of the soul is not enough to separate a mere image from a memory.

4.2. Second Interpretation: a Formal Intrinsic Distinction of the Object of Memory

I argue that a change of perspective, from the viewer's point of view, is not sufficient to distinguish the object of imagination and of memory. My claim is that the difference between a picture (mere image) and an image (a memory) is grounded on a formal component, i.e., on the intrinsic structure of the object. The image (like a painting) also introduces a kind of relation, at least the relation of identity, on the basis of which one could state "that is the picture of a horse." Consequently, the subject must have an idea of the content of the image in order to take it as an image. Indeed, the relation between a sensible form and its image includes some sort of conformity or identity as well as a relation.

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37 David Bloch, *Aristotle on Memory and Recollection: Text, Translation, Interpretation, and Reception in Western Scholasticism*, Philosophia Antica 110 (Leiden – Boston: Brill, 2007), pp. 185–86.

38 Albertus Magnus, *De mem.*, cap. 4, p. 122: "Sic igitur dicimus quod est phantasmatis considerare quandam per se sumpti considerationem. Est etiam considerare speculationem secundum quod est alterius. Et secundum quidem seipsum dicimus ipsum speculationem quandam esse aut phantasma quoddam. In quantum autem alterius est, tunc dicetur imago aut *memoratio*, quia imago perficit memorationem." Emphasis is mine.

39 Albertus Magnus, *De mem.*, cap. 4, p. 122: "Et huius exemplum est sicut nos dicamus quod anima non est considerans tantum tonsorem qui dicitur Socrates Deonis filius, qui tonsor fuit, secundum se tantum, aut etiam tonsoris imaginem est considerans tantum, sed utroque modo considerat anima tonsorem."

Second, if we take a closer look at Albert's text, he explains that these mental items are one and the same in substance (*in substantia quidem hoc est unum et idem*), but not in being (*non est in suum esse unum et idem*). Albert introduces a modal distinction between these two objects (*est multos habere modos*), meaning that they are not really distinct (*ut res and res* or *secundum subjectum*). This distinction opens a third path, situated between a mere distinction of reason produced by the mind and a real distinction. Even if the objects of imagination and of memory are not really distinct, neither is their distinction purely mind-dependent. The modal distinction stands in an intermediate position that is sufficient to describe what memories are.

We may inquire into the objects of memory and imagination by investigating the activities carried out by the faculties associated with these objects. Imagination and memory perform diverse activities. For although memory may preserve a multiplicity of images, we may visualise only one image at a time.[40] Albert the Great introduces an important distinction between the operation and the act of memory (*operatio memoriae* vs. *actus memoriae*). Regarding their operation, the distinctive functions of imagination and of memory separate two kinds of forms in the soul. As Albert puts it, these two kinds are "forms of separation" (*forma separationis*) and "forms of composition" (*forma compositionis*). Separate forms are "absolute," which bears several meanings: first, they are separated from things, *a re*; second, they are abstracted from matter in the process of perception; and third, they are considered absolutely, as taken independently from the singulars that previously caused the sensation. For instance, I may consider a painting of a barber in itself, without any relation to an existing person I have met.[41] On the other hand, composite forms are *ad res*, returning to the singulars that initiated sensation.[42] Those two opposite movements of the soul, from things and towards things, discriminate imagination and memory.[43] Imagination deals with 'forms of separation,' whereas memory has to do with 'forms of composition.'[44]

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40 Albertus Magnus, *De mem.*, cap. 1, p. 113: "Sed conservans non est nisi retinens formas in se depictas, propter quod dicit quod conservata in nobis plura sensibilia habere possumus, sed imaginari plura simul non possumus."

41 Albertus Magnus, *De mem.*, cap. 4, p. 122: "Et hinc alia passio egreditur speculationis huius quando considerat tonsoris imaginem, et alia quando considerat tonsoris absolute sicut animal pictum in tabula. Hoc enim in anima quidem fit sicut intellectus solum per abstractionem, et hoc est quando perficitur motus formae separationis ad animam a re factus."

42 Albertus Magnus, *De mem.*, cap. 4, p. 122: "Alia autem consideratio est ibi secundum quod ipsum non ut pictura quaedam, sed ut imago est et memoria quaedam, quia sic ab eo incipit reflexio in rem priorem quasi utens eo ut forma compositionis ad rem cuius est forma."

43 Albertus Magnus, *De mem.*, cap. 4, p. 123: "Isti enim motus sunt contrarii per terminus, quia unus est a re ad animam, alter autem est ab anima ad rem extra visam vel auditam vel aliter in praeterito acceptam. Et huius similitudine est in speculo concavo circumferendi sphaerico, quoniam in illo forma impressa uni parti proicitur super alteram et ab altera reproicitur super primam."

44 Albertus Magnus, *De mem.*, cap. 4, p. 122: "Diximus enim in libro *De anima* duplices esse formas animae, separationis scilicet et compositionis. Separationis quidem quae sunt a re, et illae sunt quae absolute sunt in anima. Compositione autem formae sunt quae referuntur ad res quibus applicantur. Ita etiam est in phantasmate."

Moreover, this 'form of composition' may be understood in two ways. The operation proper to memory is described as a kind of composition:

> Since memory possesses depicted figures and intentions, both of them should be in it, indeed the act of memory is perfected by a composition of these two items.[45]

As we may have seen, memory is a conservative power linked to the estimative power, whose function is to separate an intention from its image and to distinguish intentions from each other. Memory encompasses both objects (images and intentions), together with their constitutive distinctions. Whereas the estimative is a power of division and abstraction, the function of memory is to recombine the image and its intention. Therefore, in its proper operation, memory is not a purely passive power of conservation; Albert describes its activity as a kind of synthesis of elements previously divided by the estimative power. Consequently, its object is not, as in the case for imagination, something simple, but rather a complex, a compound, formed by an intention (Diares' son) and its proper image (the figure of Socrates, the existing son of Diares).

Thus, against the first line of interpretation, we may argue that the distinction between an image and a memory lies precisely in the ontology of the object. Indeed, memory adds another formal components to the mere picture of imagination: a correlative intention and its constitutive link to time. Memory is primarily concerned with 'the difference of time;' it produces a synthesis of an image and some temporal information, or of the compound formed by an intention and its image according to 'the difference of time.'[46] Consequently, as a complex composed from an intention and its image, the object of memory may no longer be interpreted as a picture viewed from another perspective: it is intrinsically and structurally different from the object of imagination. Indeed, memory adds a cognitive content to the phantasm: the intention. Following Averroes, an intention, as un-sensed form, has a higher degree of abstraction than an image; it is more formal. The synthetic operation of memory provides another form to the image: an intention. It takes the image under another mode, in that the image could not have been grasped by solely considering the phantasm, which consideration could have been performed by imagination alone. By the intention, memory grasps a formal aspect pertaining to the essence of something that does not emerge solely from the consideration of its figure (just as 'being the son of Diares' does not appear from the picture of Socrates).

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45 Albertus Magnus, *De mem.*, cap. 1, p. 114: "Cum igitur memoria habeat utrumque istorum horum, oportet in ipsa esse depictas figuras et intentiones; completur actus memoriae ex compositione horum duorum."

46 Albertus Magnus, *De mem.*, cap. 2, p. 116: "Cum igitur memorabile concernat aliquam temporis differentiam, oportet quod memoria sit facti in praeterito," "memoriale autem concernit differentiam temporis quae est praeteritum tempus."

Albert the Great does not go as far as Buridan will in his commentary on the *De memoria* by stating that time is an intention.[47] Nevertheless, he indicates two ways of perceiving time: the first is the obscure sensation of animals feeling the passing of time, and the second consists in rational apprehension, in which time may be apprehended *in se* as the "number of motion."[48] By its rationality, human memory according to Albert is more than a "feeling of the past" as described by Aristotle. It is a rational activity that understands the nature of time and its formal essence: that is, its definition as "number of motion." Therefore, in attributing a determinate quantity of time (a duration or a precise date) to an image, memory actually constitutes its proper object. Memory requires the preliminary step performed by the estimative power, that is, the separation of the intention from the image. On this basis, memory, in recomposing the intention and the image, produces its proper object, distinct from a mere image. Therefore, the object of memory is a complex composed of three components, which form its three intrinsic formal components: an image, an intention, and time.[49] As a consequence, the distinction between an image and a memory is not purely conceptual, but is grounded on intrinsic aspects of the complex formed by an image and an intention and on the formal structure of the proper object of memory.

Moreover, this *forma compositionis* should be understood to be distinguished according to the operation itself and according to the act of memory.[50] On one hand, the operation of memory is to recombine an intention with its image; on the other, the act of memory is able to refer this complex to the singular thing that previously caused it.[51] This second kind of *forma compositionis* is produced by the act of memory

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47 John Buridan, *Quaestiones De memoria et reminiscentia*, ed. by Georgius Lockert (Paris, 1516), qu. 1: "Et sic quarto concluditur quod ad actum memorandi concurrunt tria repraesentativa, puta res alias cognita, actus quo ipsa cognoscebatur et tempus in quo cognoscebatur, et alia tria repraesentativa, scilicet species rei alias cognitae, intentio actus cognoscendi et intentio seu species temporis."

48 Albertus Magnus, *De mem.*, cap. 2, pp. 116–17: "Sentitur enim tempus dupliciter, in se scilicet, secundum quod est numerus motus, et sic rationabilia sola sentiunt tempus; alio modo sentitur tempus in temporali et non secundum se. Et tunc sentitur sub determinata differentia temporis secundum quam adiacet rei temporali. Et hoc est obscure percipere tempus, et sic sentitur in praeterito quando res praeterit."

49 *De homine*, qu. XL, a. 2, p. 348: "Dicendum, quod in objecto memoriae tria conconcurrunt: quorum unum determinat rem in quam convertitur memoria per actum recordationis, et hoc est tempus praeteritum. Aliud autem est ducit rem illam ex parte animae, et est rei proximum, et hoc est imago ut imago, id est, ut ducens in rem. Tertium est illud per quod cognoscitur illa imago esse illius rei, et hoc est intentio rei elicita per compositionem et divisionem imaginum, et hoc est proximum memoriae: per intentionem enim devenit memoria in imaginem et per imaginem in rem acceptam in praeterito;" "Dicendum quod non quemadmodum bene probat obiectio. Tria enim sunt de ratione objecti memoriae, scilicet tempus praeteritum, imago ut imago, et intentio quae facit hanc imaginem esse huius rei praeteriti." This division of three formal components of the object of memory will have an influence on the later tradition; see, for instance, John Buridan in *Quaest. de mem.* qu. 1.

50 Albert posits a distinction between the operation (*operatio*) of memory and its proper act (*actus*) in the first and in the last chapter of his commentary (pp. 113–15; pp. 119–24).

51 Albertus Magnus, *De mem.*, cap. 1, p. 114: "conservativa conservat tam imagines quam intentiones, sed memoria componendo iste duo refertur ad res extra per ipsa."

(*actus memoriae*). Indeed, memory is described as a kind of 'distinctive cognition'[52] in comparison to imagination. Imagination is not able to recognise this particular thing through its images, whereas, thanks to its link with estimation, memory is able to distinguish several aspects: an intention from its image, an intention from another intention.[53] Memory preserves both these items, images and intentions, together with their constitutive differences.[54] Furthermore, the proper act of memory (*actus memoriae*) is defined as referring back to the singulars.[55] While imagination looks on the image in itself (seeing a picture of a barber), memory is able to return precisely to the things themselves. The act of memory is described as a kind of reflection on past things. It is worth noticing that this reflection is based upon the complex formed by memory.[56] Through this complex, comprised of an intention, an image as likeness, and the dimension of time, the soul is able to refer to the singular thing apprehended in the past.

5. Conclusion

In conclusion, I would like to underline the originality of Albert the Great's commentary on *De memoria*, which exceeds by far a literal paraphrase. On several points, it does not follow Aristotle completely, showing the influence of Avicenna and Averroes on this topic. For instance, the object proper to memory is a purely Medieval question, since it is placed at the junction of the Aristotelian tradition and the Arabic conception of memory, as shown by the preliminary definition of memory as a power conservative of images and intentions. Albert the Great introduces two distinctions: imagination and memory, as powers common to body and soul, are distinct (1) subjectively, that is, organically, and (2) objectively, according to their correlative objects. In close discussion with Avicenna and Averroes, Albert upholds the autonomy and consistency of the object of memory, as opposed to a mere image.

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52 Albertus Magnus, *De mem.*, cap. 3, p. 117: "Discretionem autem vocamus distinctam cognitionem unius ab alio quae fit per cogitationem quando applicatur universale particularibus ut ex propriis particularium distincta habeatur cognitio."

53 Albertus Magnus, *De mem.*, cap. 1, pp. 113–14: "Non enim distincte cognoscitur res ex ipsa eius figura, quia si hoc esset verum, tunc distincte quamlibet cognosceremus rem cuius figuram apud nos habemus. Et non posset esse, cum multa sit similitude in figuris. Sed distinctam rei cognitionem operatur in anima quando cognoscitur quod haec figura huius rei et non alterius intentio est."

54 Albertus Magnus, *De mem.*, cap. 1, p. 114: "Quintus est in organo virtutis memorativae, et ille locus est magis spiritualis inter omnes, quia recipit medullam quod tres vires, sensus communis scilicet et imaginativa et distinctiva distinxerunt, et per illud discrete et distincte ad res revertitur."

55 Albertus Magnus, *De mem.* cap. 1, pp. 113–14: "Non enim distincte cognoscitur res ex ipsa eius figura, quia si hoc esset verum, tunc distincte quamlibet cognosceremus rem cuius figuram apud nos habemus. Et hoc non potest esse, cum multa sit similitudo in figuris. Sed distinctam rei cognitionem operatur in anima quando cognoscitur quod haec figura huius rei et non alterius intentio est. Oportet igitur quod ante memoriam quaedam virtus operetur quae ex ipsa figura elicit rerum intentiones singulares."

56 *De mem.*, cap. 4, p. 122: "Alia autem consideratio est ibi secundum quod ipsum non ut picture quaedam, sed ut imago et memoria quaedam, quia sic ab eo incipit reflexion in rem priorem quasi utens eo ut forma compositionis ad rem cuius est forma."

As we have shown, the *duplex consideratio* may not be restricted to a shift in the gaze of the viewer, but instead relies on a structural and formal component in the object. In its structure, a memory is a complex formed from an image and an intention, and is linked to a temporal dimension. This leads to two major consequences.

First, since the object is a complex including an intention, a memory can no longer be solely described in pictorial terms only. Because of its complex structure, the cognitive content added by the intention, and the definition of the act of memory as a sort of judgement, a memory is endowed with a semantic property. This opens the possibility for a kind of syntactical memory, proper to humans, distinguished from the internal viewing of past images, common to all superior animals. By adding another formal aspect to the image, memory is able to grasp a thing under a new 'mode,' which lays the groundwork for a judicative memory. This will be pursued further by John of Jandun (1285–1328) and John Buridan (1300–1360).

Second, since its operation is a power of synthesis, memory is no longer interpreted as a passive potency of conservation. In recombining this image and the intention of this precise singular, memory really constitutes its proper object as formally distinct from a mere picture. The proper object of imagination is an integral part of the object of memory, which is, as a whole, a composite of the image and an intention. Moreover, memory is a capacity of 'distinctive cognition,' whose act is to refer this compound back to the things that caused it in the past. The causal relation between the image, the intention, and the complex formed by both, assures the reality of the reminder, and allows the soul, while remembering, to 'return to the things themselves.' It seems that, in the final analysis, for Albert the Great the proper object of memory is not a mental complex preserved in the soul, but the past things themselves, as the reference and term of its act.

STEN EBBESEN

Memory Is of the Past

1. Why Did Nature Equip Us with Memory?

Memory is of the past. But why do humans and some animals have the ability to store and recall past experiences? Latin question commentaries on *De memoria et reminiscentia* from the late thirteenth and early fourteenth centuries routinely discuss this question under the heading "Whether all animals have memory," and it is also treated in commentaries on *De sensu et sensato* under the heading "Whether anger and memory are found in all animals,"[1] the occasion being Aristotle's remark in *Sens.* 1.436a6–10 that:

> The most important characteristics of animals, whether common or peculiar, are clearly those that belong to both soul and body, such as sensation, memory,

1 See the lists of questions on *De sensu et sensato* and *De memoria et reminiscentia* in Sten Ebbesen, Christina Thomsen Thörnqvist, and Veronique Decaix, "Questions on *De sensu et sensato, De memoria* and *De somno et vigilia*. A Catalogue," *Bulletin de Philosophie Médiévale*, 57 (2015), pp. 59–115. Like the catalogue, the present essay owes its existence to the research project *Representation and Reality* funded for seven years (beginning of 2013 till end of 2019) by The Swedish National Bank's Tercentenary Foundation (Swedish: Riksbankens Jubileumsfond) and directed by Prof. Thomsen Thörnqvist at the University of Gothenburg.
In what follows, question commentaries on *De memoria et reminiscentia* will be referred to as *Quaest. Mem.* and commentaries on *De sensu et sensato* as *Quaest. Sens.* with 'qu. 9' meaning 'question 9'. The following commentaries are considered:
Anonymus Orielensis, *Quaestiones in De memoria*, ed. by Sten Ebbesen, in "Anonymus Orielensis 33 on *De memoria*. An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 85 (2016), pp. 128–61.
Anonymus Parisini *Quaestiones in De sensu et in De memoria*, ed. by Sten Ebbesen, in "Anonymus Parisini 16160 on *Memory*. An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 85 (2016), pp. 162–217.
Anonymus Vaticani, *Quaestiones in De sensu*, ed. by Sten Ebbesen, and Anonymus Vaticani, *Quaestiones in De sensu et in De memoria*, ed. by Sten Ebbesen, in "Anonymus Vaticani 3061 and Anonymus Vaticani 2170 on Aristotle's *Parva Naturalia*. An Edition of Selected Questions," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 86 (2017), pp. 216–312.

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Memory and Recollection in the Aristotelian Tradition: Essays on the Reception of Aristotle's *De memoria et reminiscentia*, ed. by Véronique Decaix, Christine Thomsen Thörnqvist, Turnhout, 2021 (*Studia Artistarum*, 47), p. 169-183
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10.1484/M.SA-EB.5.126090

> anger, desire, and appetite generally, and in addition to these pleasure and pain; for these belong to almost all animals. [Trl. Hett 1936, modified.]

The Aristotelian text makes it clear that while most animals possess memory, some do not. But it does not tell us which ones are the exceptions. The commentators' answer is "The imperfect ones, all perfect ones have memory."[2] Now, according to Aristotle, *De anima* III.9.432b19–26, the class of perfect animals comprises both self-moving ones and some that lack such mobility. Nevertheless, the commentators on *De sensu* and *De memoria*, while holding that only perfect animals possess memory,[3] repeatedly speak as if auto-mobility were required for perfection,[4] and then reason as follows:

> Possessing self-mobility not only offers an animal more opportunities for finding food and escaping dangers than had by animals without this advantage, it also means that it needs the ability to remember where it has found sources of food or where it has itself stored food and where dangers are lurking. Hence memory is a necessary complement to self-mobility.

(Iohannes) Buridan(us), *Quaest. Mem.* Quotes in this essay are from a makeshift edition of my own of questions 1–2, based on (1) MS Erfurt, UB, CA 2° 357, ff. 148vb–150vb, and (2) *Quaestiones et decisiones physicales insignium virorum*, ed. by George Lockert (Paris: Jose Bade, 1516), ff. XLr–v. I do not record variations between the two text witnesses, as most of them are insignificant, and when not, it is easy to see which reading is the right one.

(Iohannes de) Jandun(o), *Quaest. Mem.*, qu. 2. I quote from a makeshift edition of my own based on (1) *O* = MS Oxford, Bodleian Library, Canon. misc. 222, ff. 41/38va–42/39rb; (2) *V* = MS Vaticano, BApVat, Vat. lat. 6768, ff. 123rb–va; (3) *Ioannis Gandavensis philosophi acutissimi Quaestiones super Parvis naturalibus*, ed. Albratius Apulus (Hieronymus Scotus: Venice, 1557). I do not record minor variations between the three text witnesses.

Marsilius de Inghen, *Quaest. Mem.*, MS Uppsala, UB, C.604, ff. 135va–147va.

Peter of Auvergne, *Quaestiones in De memoria*, ed. by David Bloch, in "Peter of Auvergne on Memory," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 78 (2008), pp. 51–110.

Radulphus Brito, *Quaestiones in De sensu et in De memoria*, ed. by Sten Ebbesen, in "Radulphus Brito on Memory and Dreams. An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 85 (2016), pp. 11–86.

Buridan's commentary is from the middle and Marsilius' from the end of the fourteenth century. All the others fall in the interval *c.* 1275–1309, with Peter of Auvergne's as the earliest and Jandun's as the latest.

With the abbreviation 'Averroes, *Mem.*' I refer to the section on memory in: *Averrois Cordubensis Compendia librorum Aristotelis qui Parva Naturalia vocantur*, ed. by Emily L. Shields and Harry Blumberg, Corpus Commentariorum Averrois in Aristotelem, (Versionum Latinarum) vol. VII (Cambridge, MA: Medieval Academy of America, 1949).

2 This answer is found in Radulphus Brito, *Quaest. Sens.*, qu. 3; Anon. Vat. 3061, *Quaest. Sens.*, qu. 3; Anon. Vat. 2170, *Quaest. Sens.*, qu. 3. The question whether all animals possess memory is also treated in several commentaries on *De memoria*, and with arguments similar to those used in commentaries on *De sensu.* See Anon. Orielensis 33, *Quaest. Mem.*, qu. 8; Anon. Paris. 16160, *Quaest. Mem.*, qu. 13; Anon. Vat. 3061, *Quaest. Mem.*, qu. 5; Peter, *Quaest. Mem.*, qu. 10. A variant formulation of the problem is found in Anon. Paris 16160, *Quaest. Mem.*, qu. 6: "Whether memory is necessary for animals."

3 Several commentators wrongly claim the authority of Alexander of Aphrodisias in support of the claim that only perfect animals possess memory. Thus Anon. Paris 16160, *Quaest. Sens.* qu. 2.

4 Thus Peter, *Quaest. Mem.*, qu. 10 explicitly equates imperfect animals with those "quae sunt terrae affixa et non moventur ad aliquod distans."

The argument rests on the Aristotelian assumption of an immanent harmony of nature that ensures each species of animal has what such an animal needs to live and breed, but the argument could easily be recast in more Darwinian terms: Since no animal lives in a land of bounty with food for everyone everywhere, no self-mobile animal — humans included — would have survived if it had not developed memory. The medieval Nature provides what is necessary, but she does not squander her gifts: animals that have their food ready at hand are not equipped with a memory they do not need.[5]

Another argument, sketched by Aquinas[6] and repeated — sometimes in elaborated versions — by later commentators,[7] is based on the notion that in the hierarchy of beings the more perfect among a given genus must have some traits that are similar to the defining ones of the genus just above it. Animals do not possess reason and intellect, but the more perfect among them enjoy a 'similitudinary participation' in those higher capacities by having memory, which lets them transcend the senses' limitation to particulars available here and now.

A variant of Aquinas' *scala naturae* is used by Peter of Auvergne to explain the order of Aristotle's treatises on sense, memory and recollection:[8]

> [...] proceeding step by step, Aristotle, after the book in which he dealt with sensation, which is common to all animals, deals with memory and recollection, one of which — recollection — is only found in humans, while the other one — memory — is found only in them and in animals that are perfect and can imagine a sensible object even in its absence.

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5 Anon. Paris 16160, *Quaest. Sens.*, qu. 2: "natura non abundat in superfluis; sed si omnia animalia haberent memoriam (...), superflueret, quia memoria est praeteritorum ut sciant ubi dimiserunt alimentum suum."

6 Thomas Aquinas, *Sentencia libri De sensu et sentato, cuius secundus tractatus est De memoria et reminiscentia*, in *Sancti Thomae de Aquino Opera Omnia*, vol. xlv, 2 (Rome–Paris: Commissio Leonina–Vrin, 1985), p. 8a (my orthography): "Memoria vero et ira in eis [*sc.* animalibus imperfectis] totaliter non invenitur, sed solum in animalibus perfectis. Cuius ratio est, quia non omnia quae sunt inferioris generis, sed solum suprema et perfectiora, pertingunt ad aliquam participationem similitudinis eius quod est proprium superiori generi. Differt autem sensus ab intellectu et ratione: quia intellectus vel ratio est universalium, quae sunt ubique et semper; sensus autem est singularium, quae sunt hic et nunc. Et ideo sensus secundum suam propriam rationem non est cognoscitivus nisi praesentium. Quod autem sit aliqua virtus sensitivae partis se extendens ad aliqua quae non sunt praesentia, hoc est secundum similitudinariam participationem rationis vel intellectus. Unde memoria, quae est cognoscitiva praeteritorum, convenit solum animalibus perfectis, utpote supremum quiddam in cognitione sensitiva."

7 Thus Anon. Oriel. 33, *Quaest. Mem.*, qu. 8; Anon. Paris 16160, *Quaest. Sens.*, qu. 2; Anon., Vat. 3061, *Quaest. Sens.*, qu. 3.

8 Peter, *Quaest. Mem.*, proem: "(...) gradatim Aristoteles post librum in quo determinavit de sensu, qui est communis omnibus animalibus, determinat de memoria et reminiscentia, quorum alterum invenitur in solum hominibus, scilicet reminiscentia, alterum autem, scilicet memoria, in his et in animalibus perfectis et imaginantibus solum in absentia sensibilis." Cf. Anon. Oriel. 33, *Quaest. Mem.*, qu. 1.

2. Is Memory of the Past?

Memory is of the past, of course. If you think this obvious fact needs authoritative corroboration, just look up Aristotle, *On Memory and Recollection* 1.449b9–15:

> First, then, we must examine what kind of objects of memory there are, for this point is often the cause of mistakes. Now, one cannot remember the future, but of this one has opinion and expectation […]; nor can one remember the present, but of this there is sensation. Memory, however, is of the past.[9]

But what exactly does it mean that the object of memory (*to mnēmoneutón*) is the past? Surely not the past time *qua* past time, but rather something located in the past. This also indicated by Aristotle's Greek, in which the expressions rendered 'the future', 'the present' and 'the past' strictly speaking mean 'that which is about to happen', 'that which is present' and 'that which has happened'. This feature of the text was faithfully reproduced in James of Venice's twelfth-century Latin translation, where the crucial clause about memory, *hē de mnēmē tou genoménou* appears as *memoria autem facti est*, and James' formulation was retained when his translation was revised by William of Moerbeke about 1260.[10] The Latin commentators on *De memoria* from the thirteenth century onwards usually refer to the clause as if it read *memoria autem praeteriti est*, where *praeteriti* is ambiguous between 'of past thing/event' and 'of past time', but generally they seem to correctly take it in the former sense. A question *Utrum memoria sit solum praeteritorum (Whether memory is only of things past)*, or with some equivalent title, is a standard ingredient of question commentaries on the text.[11]

What qualifies as a *praeteritum*, a thing of the past, in this connection?[12] Caesar is a thing of the past, and exclusively of the past, not of the present or future, yet no presently living human can remember him, though we may remember what we have learned about him. By contrast, while unable to remember the long-deceased Caesar, I do remember several former teachers of mine (most of whom are now dead, though a few are still around).[13] And everybody has some memory of himself in past situations.[14] Clearly, having ceased to exist is not a requirement for being remembered.

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9 Transl. by David Bloch in *Aristotle on Memory and Recollection: Text, Translation, Interpretation, and Reception in Western Scholasticism*, Philosophia Antiqua, 110 (Leiden–Boston: Brill, 2007), p. 25, slightly modified.

10 I am grateful to Prof. David Bloch for having made his preliminary edition of James' translation available to me.

11 See the lists of questions in Ebbesen, Thomsen Thörnqvist, and Decaix (fn. 1 above).

12 The following arguments derive from the initial *rationes quod non* of the question *Utrum memoria sit solum praeteritorum.*

13 On remembering someone still alive: Peter, *Quaest. Mem.*, qu. 4; Jandun, *Quaest. Mem.*, qu. 2; Marsilius, *Quaest. Mem.* qu. 1; Jandun, *Quaest. Mem.*, qu. 2, formulates the argument as follows: "si memoria solum esset praeteriti, tunc non esset memoria hominum vivorum, sed solum mortuorum, isti enim sunt praeteriti, non autem viventes; falsum est consequens, ergo etc."

14 Memory of oneself: Anon. Oriel 33, *Quaest. Mem.*, qu. 2; Anon. Paris. 16160, *Quaest. Mem.*, qu. 4; Anon. Vat. 3061, *Quaest. Mem.*, qu. 4; Brito, *Quaest. Mem.* qu. 3; Jandun, *Quaest. Mem.*, qu. 2. Anonymus Orielensis 33 formulates the argument thus: "Aliquis potest esse memor sui, sed unusquisque sibi semper est praesens; ergo memoria potest esse praesentium."

Indeed, it may be argued — and some scholastics did argue — that the object of memory must be presently existing, for memory is a mental capacity that as an agent upgrades something from potency to act, and this requires the object of the capacity's agency (the *passum*) to be present.[15]

The commentators of the period 1270–1310 reply that memory certainly requires a present object, because what is not present cannot be actualised, but our memory is not of that present 'thing' but of 'of things past as far as the perception *(apprehensio)* by a sense is concerned', as one commentator says.[16] Or, as another has it:

> When something has previously been conceived or understood in the soul, it remains there in the way of a habit (*habitualiter*), and between the earlier perception and the present now [i.e. the present instant] there is an intermediary time. If the mind turns its attention to that previously comprehended thing, it says that it remembers in that it says that it has previously sensed or understood this, and thus memory is of things past qua past. It should, however, be understood that 'something past' may be understood in two ways: *1.* with regard to its existence, and that type of past thing *is* not; *2.* with regard to perception, and a past thing of that type is perfectly capable of existing, for nothing prevents something that is presently existing from having been perceived at some earlier time. Hence, memory is not of things past in the sense of not existing, but it is of things past in the sense of 'things that were perceived at some earlier time.'[17]

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15 The object must be present: Anon. Oriel 33, *Quaest. Mem.*, qu. 2; Anon. Paris. 16160, *Quaest. Mem.*, qu. 4; Anon. Vat. 3061, *Quaest. Mem.*, qu. 4; Brito, *Quaest. Mem.*, qu. 3; Jandun, *Quaest. Mem.*, qu. 2; Marsilius, *Quaest. Mem.*, qu. 1; Peter, *Quaest. Mem.*, qu. 4. In Brito's formulation the argument runs: "illud quod educit aliquid de potentia ad actum debet sibi esse praesens, quia agens et passum sunt simul; sed obiectum memoriae est huiusmodi; ideo etc." Marsilius also offers a variant of the argument that appeals to the role of phantasms: "Memoria est illorum quae movent potentiam ipsam memorativam ad actum memorandi; sed praesentia sunt huiusmodi; igitur etc. Consequentia et maior notae sunt. Minor apparet, nam phantasmata reservata in organo reservativo movent ipsam potentiam memorativam ad actum memorandi, ut satis notum est; sed aliqua phantasmata sunt praesentia, ex quo praesentialiter existunt; igitur etc."

16 Anon. Paris 16160, *Quaest. Mem.*, qu. 4: "Sed intelligendum quod sit praeteritorum quantum ad apprehensionem sensus, quia illa quae sunt in praesentia quantum ad esse in memoria, † quae cum† fuerunt sensata, talia memorantur. *Ad 1.* Ad rationes. *Ad 1.1* "Obiectum debet esse praesens": verum est; et ideo volo quod obiectum sit praesens memoriae, tamen non est praesens quantum ad apprehensionem cuius est memoria; et illa est apprehensio sensus."

17 Anon. Oriel 33, *Quaest. Mem.*, qu. 2: "cum in anima aliquid praeconceptum vel intellectum est, manet habitualiter, et inter priorem apprehensionem et praesens nunc est tempus medium. Si anima convertat se ad illud prius comprehensum dicit se memorari dicens se hoc prius sensisse <vel> intellexisse, et ita memoria est praeteritorum ut praeterita sunt. Intelligendum tamen quod praeteritum potest dupliciter intelligi: uno modo quantum ad esse, et tale praeteritum non est; alio modo quantum ad apprehensionem, et tale praeteritum bene potest esse, nihil enim <prohibet> aliquid praesentialiter existens prius fuisse apprehensum. Unde memoria non est praeteritorum ita quod non existentium, sed est praeteritorum i.e. eorum quae prius erant apprehensa."

In the same vein, Radulphus Brito says:

> Notice, however, that something may be past in two ways: *1.* with regard to its existence, meaning that it has been about at some earlier time but is not now; *2.* with regard to perception, meaning that it has been perceived at some earlier time but is not now being perceived. The perceiving [capacity] may be memory, sense or intellect. Now, memory is not of things past with regard to their existence, for we do remember things that are actually existent. Nor is memory of things past with regard to the perception of the object of memory, for the object must be present to the capacity in order that an actual perception may occur. […] But memory is of things past as with regard to the perception of them by a sense or the intellect, for nobody remembers anything except what has earlier been perceived by a sense or the intellect.[18]

Notice that Brito expressly accepts memories acquired by intellectual perception alongside of memories based on sensory experiences. This was an issue of debate because there would seem to be empirical evidence for memories with intellectual contents, while, on the other hand, Aristotle seems to link memory rather closely to sensation, and the contents of intellectual knowledge were assumed to be atemporal. However, I shall not pursue the matter here.

So, memory is of things past in the sense that they were perceived in the past. So far, so good. But this immediately raises the question "What is that something that is present to the mind as something perceived at some earlier time?" A seemingly obvious answer would be "A species of some thing that has been sensed" (*species rei sensatae* or *species sensibilis*). In this connection, *species* translates *éidos*, i.e. "form," as used by Aristotle in *De anima* when he talks about receiving the forms of sensibles (II.12.424b2) and says that the intellective part of the soul is potentially the forms (III.4.429a28–29) and thinks (*noéi*) the forms in phantasms (III.7.431b2). Peter of Auvergne accepts this answer:[19]

> If by 'the memorative capacity' we understand a capacity that stores species, I would say that there is a memorative capacity not only in the sensitive part

18 Brito, *Quaest. Mem.*, qu. 3: "Sed advertendum quod aliquid potest esse praeteritum dupliciter: uno modo quantum ad existentiam, ita quod prius constiterit, modo non; alio modo quantum ad apprehensionem, <ita> quod prius fuit apprehensum et modo non — apprehendens autem potest esse memoria et sensus et intellectus. Modo memoria non est praeteritorum quantum ad existentiam, quia nos memoramur aliquorum quae actu existunt. Nec memoria est praeteritorum quantum ad apprehensionem obiecti memoriae, quia obiectum debet esse praesens potentiae ad hoc quod fiat actualis apprehensio, ut argutum est. Sed memoria est praeteritorum quantum ad apprehensionem sensus vel intellectus, quia aliquis non memoratur nisi eorum quae sunt prius apprehensa a sensu vel intellectu."

19 Peter, *Quaest. Mem.*, qu. 8: "Dicendum quod si per virtutem memorativam nos intelligamus virtutem conservativam specierum, sic dicerem quod sicut in parte sensitiva est memorativa, sic in parte intellectiva, quia utrobique species conservantur. Si autem per virtutem memorativam intelligamus virtutem conservativam specierum sub ratione temporis determinati et sub fantasmate determinato, sic virtus memorativa pertinet per se ad partem sensitivam et non intellectivam, quia ipsius intellectus non est comprehendere rationem determinatam temporis nec fantasma determinatum, immo istud proprium est sensui."

> <of the soul> but also in the intellective, for species are stored in both places. If, however, by 'the memorative capacity' we understand a capacity that stores species under the aspect of a definite time (*sub ratione temporis determinati*) and a definite phantasm, then the memorative capacity by itself belongs to the sensitive part and not to the intellective, because it does not pertain to the intellect to grasp either a definite time-aspect or a definite phantasm; that is rather reserved for sense.

But how can such species gained by means of the senses carry a time-stamp saying 'Past' or even 'June 3, 1270'? Time is not the object of any sense. To overcome this difficulty, some authors stress that what is stored in memory is not the *species* that the senses pick up from things, for these are kept in phantasy,[20] but rather the accompanying (Avicennian) "un-sensed species" or "intentions."[21] Here is Anonymus Orielensis 33's presentation of the intention theory:

> So, to receive the species of sensibles is the job of the proper and the common sense, and to keep them is the job of phantasy (also called 'the imaginative' capacity); but to receive the intentions, which it [i.e. the animal] does not perceive, is the job of the estimative capacity, and to keep them of the memorative capacity. Hence, the memorative is called a 'treasury of intentions'. That it receives the intentions in that way is clear from the fact that pastness (*ratio praeteriti*), which comes along with memory, is an intention; and thus it is clear that memory differs from phantasy.

The division of labour among the capacities comes from Averroes' compendium of the *Parva Naturalia*, and so does the description of memory as a treasury. Averroes further claims that memory "brings back to us and makes present a thing of the past with such accompanying features as happiness or sadness,"[22] but he does not mention pastness as an intention. It seems promising to accord a special status to the pastness of a piece of memory, but the commentators of the late thirteenth century fail to explain how this un-sensed feature is connected to the sensed contents of such a piece of memory.

Another weakness is that, as in their accounts of dreams, there is a tendency for commentators to talk as if the contents of memory were static things rather

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20 I use the outdated spelling 'phantasy' to mean the Aristotelian faculty of *phantasia*.

21 Anon. Oriel. 33, *Quaest., Mem.*, qu 5: "Ad recipiendum ergo species sensibilium ordinatur sensus proprius et communis, sed ad retinendum ordinatur phantasia sive imaginativa; ad recipiendum vero intentiones quas non percipit ordinatur virtus aestimativa, et ad retinendum memorativa. Unde memorativa dicitur quasi thesaurus intentionum. Et quod sic recipiat intentiones patet, quia ratio praeteriti, quae ad memoriam pertinet, quaedam intentio est, et ita manifestum est quod memoria differt a phantasia." *Cf.* Anon. Paris. 16160, *Quaest. Mem.*, qu. 1: "aliter est conservativa memoria et phantasia, ut dicit Commentator, quia phantasia conservat species sensatas, sed memoria conservat non sensatas per extimativam." Qu. 6: "Imaginatio non conservat species insensatas, sed memoria conservat illas quae sunt elicitae ab extimativa." Qu. 12: "memoria est conservatio continua intentionis imaginatae." Anon. Vat. 3061, *Quaest. Mem.*, qu. 2: "memoria et imaginatio sive phantasia sunt virtutes conservativae, ita quod phantasia <con>servat species sensibilium, memoria autem magis intentiones specierum sensatarum."

22 Averrroes, *Mem.*, p. 69, versio Parisina: "memoria reducit nobis rem preteritam ad presenciam cum suis circumstanciis, inter quas forte gaudium et tristicia."

than events that unfold over time or something with a propositional structure. Like Aristotle himself, his medieval followers tended to think of dreams and memories as analogous to pictures, and they were not familiar with motion pictures. John of Jandun in the early fourteenth century goes some way toward remedying this defect:[23]

> Note that there are two ways of understanding 'This is a thing of the past': *1.* As regards its existence, like a dead man or the rain that fell yesterday, and memory need not be of things past in this sense, because then the act of remembering would never be performed with existing things, which is manifestly false. *2.* As regards some perception, i.e. that in the past some perception of it was had, and in this sense memory must be of something past. […] But perhaps there can be memory of the past regarding some other activity (*operatio*) performed in relation to the thing, not only regarding perception. For instance, one may remember that yesterday he beat up his enemy, or drank wine, and those activities are not past perceptions. So, if one is to remember that he beat up his enemy he must remember that he saw his enemy or touched him or heard him, so that remembering always involves a past perception, whether directly as when someone says that he has seen something, or indirectly (*concomitative*) as when he says he has drunk or danced or the like.

Jandun here introduces memories of our own past actions, which we have not perceived as outside observers, and the memory of which cannot have the character of a snapshot that freezes a moment in time: if remembering beating up one's enemy is a sort of pictorial memory it must be a movie, if it is not pictorial, it might mean entertaining a sort of mental proposition 'I beat up my enemy'. It looks as though Jandun accepts that such memories, though not being directly of past perception, do somehow involve it. However, the text is none too clear and he offers no in-depth analysis of the phenomenon. Apparently he decided to leave the problem for later investigation, for immediately after the passage cited follows what seems to be a

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23 Jandun, *Quaest. Mem.*, qu. 2: "Et est notandum quod aliquid esse praeteritum potest intelligi dupliciter: Uno modo quantum ad existentiam, ut homo mortuus et pluvia hesterna, et sic non oportet quod memoria sit praeteritorum, quia tunc actus memorandi numquam exerceretur in aliquibus existentibus, quod manifeste falsum est. Alio modo est aliquid praeteritum quantum ad apprehensionem aliquam, scilicet quod in praeterito habita fuit aliqua apprehensio de ipso, et sic oportet quod memoria sit alicuius praeteriti. Vel primo modo. Et videtur Aristoteles velle quod semper memoria est praeteriti quantum ad apprehensionem; dicit enim sic: "Semper enim cum secundum memorari agat, sic in anima dicit quia haec prius vidit aut audivit aut intellexit." Sed forte memoria potest esse praeteriti quantum ad aliquam aliam operationem exercitam circa ipsam rem, non solum quantum ad apprehensionem, ut aliquis potest memorari quod heri percussit inimicum aut bibit vinum, et tamen illae operationes non sunt apprehensiones praeteritae: ut si quis debet memorari se percussisse inimicum oportet quod memoretur quod vidit inimicum aut audivit aut tetigit aut aliquam aliam apprehensionem habuit de ipso, ita quod memorari semper concernit apprehensionem praeteritam, vel directe sicut si aliquis dicit se vidisse, vel comitative sicut cum dicit se bibisse aut tripudiasse aut huiusmodi."

self-exhortation to further investigation: *De hoc inquire usque ad fundum* ("Examine this in depth!"[24])

3. Excursus: Actual, Habitual and Potential Memory

David Bloch has argued that the Aristotelian concept of memory is a rather narrow one: to remember (*mnēmoneúein*) something is to be in a certain state (*héxis* or *páthos* at *De memoria* 1.449b25). There is no act of memory, but there is something Aristotle calls "acting with/concerning memory or remembering" (*tēi mnēmēi energéin, kata to mnēmoneúein energéin*), which, Bloch holds, means "applying one's capability of remembering to an object (epistemic or perceptual) and thus bringing about the state or remembering."[25]

As opposed to Bloch, the medieval commentators generally take *habitus (= héxis)* and *passio (= páthos)* as describing two genuinely different aspects of memory more widely understood. Commenting on 1.449b24–25, Thomas Aquinas explains:[26]

> He concludes from the above what memory is, for it is not sense, for sense is only of things present, nor is it opinion, for it can also be about future things, but it must be connected to one of them either in the way of a habit, i.e. if it is a lasting capacity, or in the way of a passion, i.e. if it is some transient impression.

And on 1.451a12ff:[27]

> It is obvious that the habit of things to remember is consolidated by frequent acts or remembering, as is any other habit by similar acts. […] Next […] he says that it has been said what memory and remembering is, namely that memory is a habit, i.e. a habitual conservation of a phantasm.

In line with the habit interpretation, the commentators often treat memory as a store-house in which species or intentions are kept and call it a *virtus conservativa*,

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24 MS *V* has the correct reading *de hoc inquire*. *O* reads *videntur de hoc inquire*, which by a *Verschlimmbesserung* has become *videntur de hoc inquirere* in the 1557 edition.

25 David Bloch, *Aristotle on Memory and Recollection: Text, Translation, Interpretation, and Reception in Western Scholasticism* (Leiden–Boston: Brill, 2007), p. 75: "There is no real process to be identified in remembering, or rather: remembering *is* being in a certain state." Bloch's explanation of 'acting with memory' is found on p. 97. Bloch also analyzes medieval theories, and his analyses supplement the present study in important ways, but will not be referred to below.

26 Thomas Aquinas, *Sentencia*, (see fn. 6), p. 106b (my orthography): "concludit ex praemissis quid sit memoria: quia neque est sensus, qui est solum praesentium; neque est opinio quae potest etiam esse futurorum: sed oportet quod ad aliquid horum pertineat vel per modum habitus, puta si sit aliqua vis permanens, vel per modum passionis, puta si sit aliqua impressio transiens (…)."

27 Thomas Aquinas, *Sentencia*, p. 116b (my orthography): "Manifestum autem est quod ex frequenti actu memorandi habitus memorabilium confirmatur, sicut et quilibet habitus per similes actus (…) Deinde (…) dicit quod dictum est quid memoria et memorari, quia memoria est habitus, idest habitualis quaedam conservatio phantasmatis (…)."

a "preserving power" or "preserving capacity," an expression borrowed from Averroes.[28]

Yet, on many occasions the commentators' memory is a "having something present to the mind." The argument about the necessary presence of the object of memory that we encountered in § 2 assumed that there is both passive (potential) and active (actual) memory. Anonymus Parisini 16160 makes some useful distinctions:[29]

> It must, however, be understood that just as 'intellect' sometimes designates the substance of the soul, sometimes an act of understanding, and sometimes a habit of the things that may be understood, sometimes what is in the intellect, i.e. the species, similarly 'memory' is taken for a potency, sometimes for an act of memory, and sometimes for what it remembers, and in this sense it is a habit, but in the second way it is a passion or an act. […] when it is said that it is a passion, this is true — if it is taken in the sense of the activity, but if you take it in the sense of that which it remembers, it is a habit […] And you say: 'But aren't the species of the things that may be remembered stored in memory? Surely. Consequently, it will be able to remember.' I say that the things that may be remembered are not in it in second act(uality), but in first act(uality), i.e. in habit.

The introduction of the distinction between first and second act or actuality is an important step towards integrating a wide concept of memory in a general Aristotelian framework. We shall meet this distinction again in § 4.

According to Anonymus Vaticani 3061, memory, like recollection, tracks the intentions of something lost.[30] And that, of course, means that it is not purely passive or purely habitual. It also means that the distinction between (active) memory and recollection becomes somewhat blurred, though there were ways to preserve it. For instance, one could hold that although actual memory occurs after a period in which the remembered contents have not been present to consciousness, the contents were

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28 Anon. Paris 16160, *Quaest. Mem.*, qu. 1; Anon. Vat. 3061, *Quaest. Mem.*, qu. 2. *Virtus conservativa* occurs in Averroes, *Mem.* 65 (also 62, as a variant reading).

29 Anon. Paris 16160, *Quaest. Mem.*, qu. 5: "Intelligendum tamen quod sicut 'intellectus' aliquando nominat substantiam animae, aliquando actu<m> intelligendi, aliquando autem habitum intelligibilium, aliquando illud <quod> est in intellectu, ut species, sic similiter "memoria" accipitur pro potentia, aliquando pro actu memoriae, aliquando pro illo quod memoratur, et sic dicitur quod est habitus; sed secundo modo est passio vel actus. (…) cum dicitur quod est passio, verum est — si accipitur pro operatione memoriae; et si accipias pro illo quod memoratur, est habitus (…) Et tu dicis 'Nonne in memoria conservantur species memorabilium? Certe ita! Ergo poterit memorari': dico quod memorabilia non sunt in ipso actu secundo sed primo, scilicet habitu." Cf. qu. 8: "Intelligendum hic quod memoria potest accipi dupliciter vel tripliciter: vel pro potentia illa, vel pro operatione, vel pro habitu consequente illam potentiam, sicut dicit<ur> de intellectu: aliquando accipitur pro potentia illa, aliquando pro operatione, aliquando pro habitu eius."

30 Anon. Vat. 3061, *Quaest. Mem.*, qu. 2: "memoria et reminiscentia (…) utraque est quaedam virtus per quam invest<igat>io fit cuiusdam intentionis deperditae." The formulation is indebted to Averroes, *Mem.*, 48: "Rememoratio enim est reversio in presenti intentionis comprehense in preterito. Investigatio autem per rememorationem est inquisitio istius intentionis per voluntatem et facere eam presentari post absentiam."

not really lost during that phase. Rather they were habitually present, i.e. present as a habit in the same way that a practical skill or a piece of intellectual knowledge is 'present' even when not in use. By contrast, one could say recollection occurs after a period in which the contents were really gone (forgotten), at least partly, so that they must be reconstructed through a chain of reasoning.[31] An interesting variant of this way of upholding the distinction occurs in Anonymus Orielensis 33, in the determination of the question 'Whether forgetting is a feature of memory' (*Utrum oblivio pertineat ad memoriam*):[32]

> The solution is that forgetting is not required for memory. The reason is that the memorative capacity is a capacity that knows a thing that has previously been perceived by a sense or by the intellect under the intention of pastness, and therefore an intermediate time is required between the earlier perception and the memory of it, in which intermediate time there is a habitual preservation of this thing by means of a phantasm, in so far as the phantasm is an image and picture of it. But forgetting something means totally excluding or eliminating it from the soul, and so forgetting is not required for memory.
> Notice, however, that memory and recollection differ as follows: recollection searches for something that has dropped out of memory, and so recollection involves forgetting; but memory is the sudden and instantaneous coming-to-mind (*recordatio*) of something previously perceived by means of something reposing in the mind, and so forgetting is not needed for there to be memory.

The way the anonymous author distinguishes memory from recollection in the second paragraph seems to me to be very useful. In lots of situations we entertain trains of thought involving past experiences and talk about them without pausing for a moment to call them up, they just present themselves spontaneously. Afterwards, someone may ask "Do you really remember all that about things that happened half a century ago?," and unless we have knowingly interspersed our memory-based talk with fake reports of memories, we can answer 'Yes' without hesitation. We need not go hunting for the memories that we reported. If required we can repeat the report immediately. On the other hand, there are other situations where we feel that there is a gap in our memory, a piece of experience or insight that we once had ready to hand must now be laboriously recalled.

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31 Thus Anon. Paris 16160, *Quaest. Mem.*, qu. 5, qu. 12 and qu. 17.

32 Anon. Oriel. 33, *Quaest. Mem.*, qu. 6: "Dicendum quod ad memoriam non requiritur oblivio. Et ratio huius est quia memorativa est cognitiva rei prius apprehensae per sensum vel per intellectum sub intentione praeteritionis, et ideo inter priorem apprehensionem rei et eius memoriam requiritur tempus medium, in quo quidem tempore medio est habitualis conservatio illius rei per phantasma in quantum est imago et pictura eiusdem; sed oblivio est totalis exclusio vel exterminatio rei ab anima; ergo ad memoriam non requiritur oblivio. Advertendum tamen est quod aliter est de memoria et reminiscentia. Reminiscentia enim est inquisitiva alicuius quod a memoria excidit, et ideo ad reminiscentiam pertinet oblivio; sed memoria est subita et instantanea recordatio alicuius prius apprehensi per aliquid in anima manens, et ideo ad ipsam memoriam non requiritur oblivio."

4. John Buridan Wraps up the Discussion

The way the commentators of the late thirteenth-century set up the problem about the presence or pastness of the object of memory is still there in John Buridan's commentary from about the middle of the next century, but in his solution he introduces some useful precisions. Several of these can already be found in his predecessors, but not as neatly presented and connected.

4.1. Senses of 'Memory'

Buridan distinguishes more senses of 'memory' than his predecessors.[33] They are the following:

1. A certain mental capacity (*virtus animae*), which comes in two variants:
1.1. A non-cognitive one in which the species or intentions are in the sense that it is their subject, i.e. it is that which stores them.
1.2. A cognitive one in which the second act of memory (2.2, below) is as in its subject. This capacity is, in fact, what Aristotle calls 'the first sensitive', i.e. the common sense, to which the species are 'presented as representatives' (*repraesentatae*).
2. An act of that capacity, which also comes in two variants:
2.1. As a species or intention stored in some mental capacity, which allows us to realise quickly that we once saw or cognised a certain thing. This non-cognitive act is traditionally called the first act of memory.
2.2. As an act by which, by means of stored species/intentions, we realise that we have seen or cognised certain things. This is a cognitive act, and is traditionally called the second act of memory.

The two senses of 'act of memory' explains why we sometimes say that people remember something even if they do not at the moment think about it, and sometimes, under the same conditions, that they are not remembering it.

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33 Buridan, *Quaest. Mem.*, qu. 1: "ad magis explicandum istam materiam notandum est quod memoria aliquando accipitur pro aliqua virtute animae et aliquando pro actu illius virtutis, unde sic etiam istis duobus modis capiuntur saepe et sensus et intellectus. Si ergo memoria capiatur pro actu virtutis animae, ille est duplex: unus est species vel intentio reservata in aliqua virtute animae secundum quam prompte possumus duci ad cognoscendum et iudicandum quod talem rem alias vidimus vel cognovimus, et illo actu nihil cognoscimus formaliter, immo illum actum habemus dormiendo et nihil considerando; alius actus est quo per tales species vel intentiones reservatas iudicamus nos talia vidisse aut cognovisse, et ille est actus cognoscitivus quo formaliter cognoscimus et iudicamus. Actus prior, scilicet species vel intentio reservata solet vocari actus primus memoriae, et actus ille cognoscitivus solet vocari actus secundus memorativus. Unde propter actum primum dicimus aliquando illum qui dormit et nihil considerat memorari de tali opere et non oblitum esse, et aliquando dicimus ipsum non actu memorari quia nihil actu cognoscit. Et secundum hoc etiam oportet ponere duplicem potentiam animae memorativam: unam in qua subiective sunt illae species vel intentiones reservatae, et illa non est cognoscitiva sed solum reservativa; alia est in qua est subiective actus secundus memorandi, qui est cognoscitivus, et illa virtus etiam est cognoscitiva, et est, sicut dicit Aristoteles, primum sensitivum, scilicet sensus communis, cui illae species reservatae repraesentantur."

4.2. What is Required for Remembering?

Buridan posits four conclusions:[34]

1. The act of remembering presupposes a past act of cognition about which we say that we have memory.
2. The act of remembering takes as its object not only a certain thing cognised in the past but also the relevant past act of cognition and the past time in which that act took place.
3. In the storing capacity called memory (or in its organ) three things must be stored:
   3.1. Something representing the thing once cognised. In traditional terminology, this is a sensible or intelligible species.
   3.2. Something representing the act of cognition by which we once cognised that thing — in traditional terminology, an intention.
   3.3. Something (a species/intention) representing the time in which we cognised that thing.
4. The act of remembering involves six elements:
   4.1. Three represented ones, viz.
   4.1.1. The thing once cognised.
   4.1.2. The act by which it was cognised.
   4.1.3. The time in which it was cognised
   4.2. Three representing ones, viz.
   4.2.1. The species of the thing once cognised (= 3.1)
   4.2.2. The intention of the act of cognising (= 3.2).
   4.2.3. The intention or species of the time (= 3.3).

Having thus established what is in his toolbox, Buridan can answer the question whether memory is of something past:

a) Memory in the sense of memory of any of 4.2.1–3 is of something present, for such items must be present in either phantasy or the capacity of memory, or else they could not lead to any act of remembering.

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34 Buridan, *Quaest. Mem.*, qu. 1: "concluditur quod ad actum memorandi requiritur actus cognoscendi praeteritus, de quo nos dicimus habere memoriam, ut quod vidi vel audivi, ita quod non sufficit actus praesens vel futurus nisi fuerit etiam actus praeteritus. Secundo etiam concluditur quod actus memorandi non solum cadit obiective super rem alias cognitam, immo etiam super actum cognoscendi praeteritum, et etiam super tempus praeteritum in quo fuit ille actus. Tertio concluditur quod in virtute memorativa reservativa, quae potest vocari memoria, sive in organo illius virtutis, oportet esse tria reservata: primo quidem repraesentativum rei alias cognitae, et hoc solet vocari species sensibilis vel intelligibilis; secundo repraesentativum actus cognoscendi quo illam rem alias cognovimus, et hoc solet vocari intentio; et tertio repraesentativum temporis in quo illam rem cognovimus. Quarto concluditur quod ad actum memorandi sex concurrunt, scilicet tria repraesentata – puta res alias cognita, actus quo ipsa cognoscebatur, et tempus in quo cognoscebatur – et alia tria repraesentativa, scilicet species rei alias cognitae, intentio actus cognoscendi, et intentio seu species temporis." With modifications, Buridan's scheme is repeated by Marsilius of Inghen, *Quaest. Mem.*, qu. 1.

b) Memory in the sense of memory of 4.1.1, the thing once cognised, can be of something present or future as well as of something past. Though only in an indirect way, one can 'remember' the future Antichrist in the sense of remembering having thought about him, or a past sun in the sense of remember having seen the sun, although the sun is not present at the moment of remembering.
c) Memory in the sense of memory of 4.1.2 or 4.1.3 requires that the object belong to the past.

4.3. Does Buridan Solve the Problems?

Buridan's distinctions do much to tidy up the somewhat messy batch of distinctions and theories that his predecessors had left him. They also give the concept of representation (*repraesentatio*) a key role in their theories, a concept which had played no role in the works from the late thirteenth century — or if it did, then at least it did not do so under that name.[35] As I see it, the main unsolved problems are:
a) How do we register time? Buridan seems not to care much about the distinction between species and intention, which was supposed to solve the problem of how we can 'perceive' time although it is not the object of any sense.
b) Like his predecessors, Buridan does not specify what exactly our awareness that something belongs to past experience involves. Does it mean that we just know this happened in the past and not in the present or the future? Or is some sort of dating involved, for instance by synchronisation with other past experiences?
c) Buridan does not explain how 4.1–3 (the species of the thing cognised, the intention of the thing cognised, and the species or intention of time) come together in normal actual (not merely potential) remembering.

As for (c), Buridan would probably say that the common sense takes care of that, for in his second question on *De memoria* he dispenses with the Avicennian array of inner senses, retaining only phantasy and common sense. Memory as a capacity of the mind that is the subject of a cognitive memorative act is identical with the common sense; as a capacity that is the subject of stored species, it is identical with phantasy. Understood as the memorative act itself, memory is an accident of the common sense (cf. sense 2.2 of 'memory' as described in qu. 1). Memory as a habit is subjectively in phantasy, and is, indeed, nothing but the stored species and intentions. However, memory as a habit can also be objectively in the common sense, because a

35 I have only found one instance of *repraesentare* or *repraesentatio* in thirteenth century commentaries on *De memoria*. Thomas Aquinas, *Sentencia*, p. 115a, on *Mem.*, 1.450b15–17 (my orthography): "dicit quod si huiusmodi passio quae est praesens memoranti est in nobis sicut quaedam figura aut pictura ipsius sensus, id est repraesentans primam immutationem sensus a sensibili, quare memoria erit alterius, scilicet rei, et non ipsiusmet figurae vel picturae?"

stored species or intention may be brought up for new examination by the common sense leading to a renewed judgment about something sensed, even in its absence.[36]

However, I do not know of a text where Buridan fleshes out how the common sense can perform its job of packing the various sorts of stored information into the right packages. I must leave this problem, as well as other problems concerning the role of the common sense in medieval theories of memory, for other scholars to investigate.

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36 Buridan, *Quaest. Mem.*, qu. 2: "sciendum est quod plures philosophi, ut Avicenna primo et alii consequenter post ipsum, distinxerunt quattuor virtutes pertinentes ad sentiendum (et dico de virtutibus interioribus), et posuerunt quattuor distincta organa earum. [*a presentation of the Avicennian capacities follows, then*:] Tamen videtur mihi quod Aristoteles non posuit tot virtutes interiores, sed solum duas, scilicet sensum communem, quem semper vocavit primum et principale sensitivum, et credidit illum habere omnem potentiam quam alii attribuunt virtuti cogitativae, et posuit aliam virtutem phantasiam, quae est reservativa et non cognoscitiva, quam credidit habere omnem potentiam quam alii attribuunt sibi et virtuti memorativae, prout virtus memorativa ponitur reservativa. Et non apparet mihi quod aliquae rationes cogant ad ponendum plures tales virtutes, et ideo pono solum illas duas.
Notandum est quod hoc nomen "memoria" solet capi multipliciter: uno modo pro virtute aliqua animae vel etiam corporis simul, alio modo pro habitu distincto ab huiusmodi virtute et etiam distincto ab actu cognoscitivo memorativo, et tertio modo capitur pro actu cognoscitivo memorativo quo actu iudicamus nos alias hoc vidisse vel audivisse.
Si ergo capitur memoria pro illo actu cognoscitivo memorativo, sic memoria est passio sensus communis, scilicet primi sensitivi, ita quod est accidens illius communis sensitivi, ipsi sensui communi inhaerens, cum non ponamus aliam virtutem sensitivam et cognoscitivam interiorem nisi sensum communem.
Si vero memoria capitur pro habitu, scilicet distincto a praedicto actu et a virtute animae, sic ille habitus nihil aliud est quam species et intentiones reservatae in phantasia, et ideo sic memoria est passio phantasiae subiective, quia inhaeret phantasiae.
Tamen adhuc quodammodo potest dici habitus respectu sensus communis non subiective sed obiective, quia illa species vel intentio reservata potest iterato obici et repraesentari sensui communi, et sic movere ipsum ad iterato sentiendum et iudicandum de sensibilibus alias sensatis in absentia ipsorum, et sic debent intelligi verba Aristotelis, scilicet quod memoria est habitus vel passio primi sensitivi, i.e. sensus communis."
Si vero memoria capitur pro virtute animae, tunc illa virtute quae subicitur intentionibus reservatis, et sic est idem quod phantasia; vel capitur pro illa virtute quae subicitur actui cognoscitivo memorativo, et sic est idem quod sensus communis."

CHRISTINA THOMSEN THÖRNQVIST

Aristotle and His Early Latin Commentators on Memory and Motion in Sleep*

1. Introduction

Many of us have been observed to move or talk in our sleep without having any memory of the incident upon waking. The fact that sleepwalkers and sleeptalkers often have limited memory of their activities is well known. It is hardly surprising that memory is deficient in sleep, since the state of sleep profoundly affects our perceptual capacity and level of conciousness. At the same time, however, most of us seem to be able to remember at least fragments of our dreams. It is tempting to assume that we have some capacity to remember 'sense impressions' arising from interior mental processes in sleep, but no capacity to remember external stimuli or bodily processes such as physical motion. But is it that simple? And how does this difference come about? The present chapter will examine discussions of the function of memory in sleep as they appear and develop in the earliest phase of the medieval commentary tradition on Aristotle's *De somno et vigilia* (*Somn.Vig.*) and *De insomniis* (*Insomn.*). More precisely, I will examine a selection of commentaries from Adam of Buckfield's literal commentary composed in the first half of the thirteenth century[1] to Buridan's question commentary from the first half of the fourteenth.[2]

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1 For the chronology of Adam's commentary on *De somno*, see Charles Burnett, "The Introduction of Aristotle's Natural Philosophy into Great Britain: A Preliminary Survey of the Manuscript evidence," in *Aristotle in Britain during the Middle Ages*, ed. by John Marenbon (Turnhout: Brepols, 1996), pp. 21–50 (pp. 40–41).

2 Aristotle's three treatises on sleep and dreams (which, in addition to the two works mentioned above, include also the *De divinatione per somnum*) circulated as one work in the Latin West, usually under the title of the first of the three. Hence, the abbreviated collective title *De somno* used in this

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Aristotle comments on the difference between the recollection of dreams and the recollection of 'waking acts' (ἐγρηγορικά) performed in sleep in *Somn.Vig.*, 2.456a24–29:

> Some sleepers move and perform many actions akin to waking ones, although not without some appearance (*phantasma*) or perception. For a dream is, in a certain way, a sense-impression. But those matters we must dicuss later. Why it is that on being awakened people remember their dreams, but do not remember the actions akin to waking ones they have done, has been stated in the *Problems.*[3], [4]

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chapter represents all three treatises. There are general surveys of the medieval commentaries on the *Parva naturalia* in, e.g., the following works: Pieter de Leemans, "*Parva naturalia*, Commentaries on Aristotle's," in *Encyclopedia of Medieval Philosophy: Philosophy between 500 and 1500*, vol. I, ed. by Henrik Lagerlund (Dordrecht: Springer, 2011), pp. 917–23; Michael Dunne, "Thirteenth and Fourteenth-Century Commentaries on the *De longitudine et brevitate vitae*," *Early Science and Medicine*, 8.4 (2003), pp. 320–35; Graziella Federici Vescovini, "La tradizione dei *Parva naturalia* nell'insegnamento universitario medievale (secoli XIIIe XIV)," in *Parva naturalia: Saperi medievali natura e vita*, ed. by Chiara Crisciani, Roberto Lambertini and Romana Martorelli Vico (Pisa: Istituti editoriali e poligrafici internazionali, 2004), pp. 125–41. There are useful inventories of works and manuscripts in Jozef de Raedemaeker, "Une ébauche de catalogue des commentaires sur les *Parva naturalia*, parus aux XIII^{e}, XIV^{e} et XV^{e} siècles," *Bulletin de philosophie médiévale*, 7 (1965), pp. 95–108; Charles H. Lohr, *Latin Aristotle Commentaries*, 5 vols (Firenze: Sismel Edizioni del Galluzzo, 1988–2013); *Le travail intellectuel à la Faculté des arts de Paris: Textes et maîtres (ca. 1200–1500)*, ed. by Olga Weijers and others, 9 vols (Turnhout: Brepols, 1994–2012). I have recently, together with Sten Ebbesen and Véronique Decaix as part of the research programme *Representation and Reality* (see the preface of this volume), published a catalogue of *quaestiones* on *De sensu et sensato*, *De memoria et reminiscentia* and the treatises on sleep and dreams in "Questions on *De sensu et sensato*, *De memoria* and *De somno et vigilia*: A Catalogue," *Bulletin de philosophie médiévale*, 57 (2015), pp. 61–115.

3 κινοῦνται δ' ἔνιοι καθεύδοντες καὶ ποιοῦσι πολλὰ ἐγρηγορικά, οὐ μέντοι ἄνευ φαντάσματος καὶ αἰσθήσεώς τινος· τὸ γὰρ ἐνύπνιόν ἐστιν αἴσθημα τρόπον τινά· λεκτέον δὲ περὶ αὐτῶν ὕστερον. διότι δὲ τὰ μὲν ἐνύπνια μνημονεύουσιν ἐγερθέντες, τὰς δ' ἐγρηγορικὰς πράξεις ἀμνημονοῦσιν, ἐν τοῖς Προβληματικοῖς εἴρηται.
All passages from *Somn.Vig.* and *Insomn.* are quoted from Aristotle, *Parva naturalia*, ed. by William David Ross (Oxford: Clarendon Press, 1955). English translations are from David Gallop, *Aristotle on Sleep and Dreams: A Text and Translation with Introduction, Notes and Glossary* (Peterborough: Broadview Press, 1991).

4 I have elsewhere (Christina Thomsen Thörnqvist, "Sleepwalking Through the Thirteenth Century: Some Medieval Latin Commentaries on Aristotle's *De somno et vigilia* 2.456a24–27," *Vivarium*, 54 (2016), pp. 286–310) discussed the first part of the passage above in relation to the early Latin reception of *De somno et vigilia* and *De insomniis* and demonstrated that, for several reasons, Aristotle's remark on motion in sleep is one of the passages in Aristotle's treatises on sleep and dreams that particularly caught the interest of the medieval commentators: The remark is seemingly in opposition to Aristotle's definition of sleep as "the immobilisation or fettering of sensation" (*Somn.Vig.*, 1.454b9–11: ὁ γὰρ ὕπνος πάθος τι τοῦ αἰσθητικοῦ μορίου ἐστίν, οἷον δεσμός τις καὶ ἀκινησία; cf. *Somn.Vig.*, 1.454b25–26: τῆς δ' αἰσθήσεως τρόπον τινὰ τὴν μὲν ἀκινησίαν καὶ οἷον δεσμὸν τὸν ὕπνον εἶναί φαμεν) as well as his conclusion that no living being can have any sensation in sleep (ἀδύνατον δ' ἐστὶν ἁπλῶς ὁποιανοῦν αἴσθησιν αἰσθάνεσθαι τὸ καθεῦδον ζῷον, φανερὸν ὅτι πάσαις ἀναγκαῖον ὑπάρχειν τὸ αὐτὸ πάθος ἐν τῷ καλουμένῳ ὕπνῳ· εἰ γὰρ τῇ μέν, τῇ δὲ μή, ταύτῃ καθεῦδον αἰσθήσεται, τοῦτο δ' ἀδύνατον (*Somn.Vig.*, 2.455a9–12); cf. *Insomn.*, 1.458b3–9). The remark also claims that waking acts performed in sleep necessarily require dreaming.

Aristotle's reference to his *Problemata* is a dead end; the promised explanation to why we remember our dreams but not our motions in sleep is not to be found in the extant version of the work.[5]

One passage in *Insomn.* is particularly noticeable in this connection. Here, while seeking to provide evidence for his conclusion that not all *phantasmata* that occur in sleep are dreams, Aristotle provides various examples of incidents where the sleeper clearly perceives external objects:

> For, in the first place, some people have the experience of actually perceiving, in a certain manner, sounds and light, flavour and touch, albeit faintly and as if from a distance. For it has been known for people with their eyes partly open during sleep to recognise, as soon as they wake up, that what they saw dimly while asleep, as the light of a lamp (as they supposed) was indeed from the lamp. Or again, after faintly hearing the noise of the cocks and dogs, they recognised these clearly upon waking up […] None of these things should be called a dream. Nor should any true thoughts that may occur during sleep, over and above the appearances (*phantasmata*). Rather, it is an appearance (*phantasma*) which arises from the movement of the sense-impressions, while one is in the sleeping state and in virtue of one's being asleep, that is the dream proper.[6]

The section *Insomn.* 3.462a16–31, from which the passage above is quoted, entails a modification of Aristotle's previous statements in *Somn.Vig.* that perception of external sense impressions in sleep is impossible.[7] Further on, in *De divinatione per somnum* (*Div. Somn.*) 1.463a7–17, Aristotle discusses another aspect of sense impression in sleep: the well-known phenomenon that small stimuli seem large to the sleeper. In this case, the stimuli refered to are all internal movements in the body.

> For movements occuring in the daytime, unless they are very big and powerful, pass unnoticed alongside those of the waking state, which are bigger. But during sleep the opposite happens. For then even slight movements seem to be big. This is clear from frequent occurrences in the course of sleep. People think it is lightning and thundering, when faint echoes are sounding in their ears; or that they are enjoying honey and sweet flavours, when a tiny drop of phlegm is

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Such a necessary connection has been refuted by modern neuroscience, but the question to what extent there is a correlation between dream content and motor activity in sleep remains insufficiently settled today (See Thomsen Thörnqvist, "Sleepwalking," p. 306, n. 79).

5 For an overview of the history of the *Problemata*, see "Introduction" in *Aristotle's Problemata in Different Times and Tongues*, ed. by Pieter de Leemans and Michèle Goyens, Medievalia Lovaniensia Series I: Studia XXXIX (Leuven: Leuven University Press, 2006), pp. ix–xi.

6 πρῶτον μὲν γὰρ ἐνίοις συμβαίνει καὶ αἰσθάνεσθαί πῃ καὶ ψόφων καὶ φωτὸς καὶ χυμοῦ καὶ ἁφῆς, ἀσθενικῶς μέντοι καὶ οἷον πόρρωθεν· ἤδη γὰρ ἐν τῷ καθεύδειν ὑποβλέποντες, ὃ ἠρέμα ἐώρων φῶς τοῦ λύχνου καθεύδοντες, ὡς ᾠοντο, ἐπεγερθέντες εὐθὺς ἐγνώρισαν τὸ τοῦ λύχνου ὄν, καὶ ἀλεκτρυόνων καὶ κυνῶν φωνὴν ἠρέμα ἀκούοντες ἐγερθέντες σαφῶς ἐγνώρισαν […] ὧν οὐθὲν ἐνύπνιον φατέον, οὐδ' ὅσαι δὴ ἐν τῷ ὕπνῳ γίνονται ἀληθεῖς ἔννοιαι παρὰ τὰ φαντάσματα, ἀλλὰ τὸ φάντασμα τὸ ἀπὸ τῆς κινήσεως τῶν αἰσθημάτων, ὅταν ἐν τῷ καθεύδειν ᾖ, ᾗ καθεύδει, τοῦτ' ἐστὶν ἐνύπνιον (*Insomn.*, 3.462a19–31).

7 I have discussed this previously in Thomsen Thörnqvist, "Sleepwalking," p. 292, n. 23.

> running down; or that they are walking through fire and feeling extremely hot, when a slight warmth is affecting certain parts. But as they wake up, it is obvious to them that those things have the above character.[8]

The two passages have something in common. In *Insomn.* 3.462a21–25, the sleeper recognises a certain external sense impression when he wakes up. This is interesting, because in order for someone to recognise certain stimuli to which he or she has been exposed while sleeping, the sleeper must not only first have perceived these stimuli, but also have the capacity to store them in his or her memory and to recover them after waking up, so that the impression received in sleep can be compared to and identified with the impression received upon waking. Also in the passage in *Div. Somn.* quoted above, the sleeper after waking up apparently has the ability to compare a certain weak sense impression to a sense impression that he remembers as strong from his sleep and find out the true state of affairs, that is, that these sense impressions actually originate from the same stimulus. Hence, not only internal perceptive elements, such as dreams, seem to generate memories in sleep, but also external ones. So is Aristotle's claim in *Somn.Vig.* that the sleepwalker is capable of remembering his dream but incapable of remembering having sleepwalked not to be understood as categorically as it is expressed?

2. Strong Impressions and Weak Ones: Memories of External Sense Impressions in Sleep

Since Aristotle's promised answer to the question in *Somn.Vig.* 2.456a27–29 either never materialised or was lost before the Middle Ages, the reader—medieval or modern—is left with the task of reconstructing it. But how far would such an attempt take us? The earliest extant Latin commentary on *De somno*, a literal commentary by the Oxford master Adam of Buckfield (*c.* 1220–not later than 1293), leaves the question in *Somn.Vig.* 2.456a27–29 unanswered,[9] but from Albert the Great (*c.* 1200–80) onwards, a reconstruction of Aristotle's solution to the problem is found in several of the extant commentaries.

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8 αἱ γὰρ μεθ' ἡμέραν γινόμεναι κινήσεις, ἂν μὴ σφόδρα μεγάλαι ὦσι καὶ ἰσχυραί, λανθάνουσι παρὰ μείζους τὰς ἐγρηγορικὰς κινήσεις, ἐν δὲ τῷ καθεύδειν τοὐναντίον· καὶ γὰρ αἱ μικραὶ μεγάλαι δοκοῦσιν εἶναι. δῆλον δ' ἐπὶ τῶν συμβαινόντων κατὰ τοὺς ὕπνους πολλάκις· οἴονται γὰρ κεραυνοῦσθαι καὶ βροντᾶσθαι μικρῶν ἤχων ἐν τοῖς ὠσὶ γινομένων, καὶ μέλιτος καὶ γλυκέων χυμῶν ἀπολαύειν ἀκαριαίου φλέγματος καταρρέοντος, καὶ βαδίζειν διὰ πυρὸς καὶ θερμαίνεσθαι σφόδρα μικρᾶς θερμασίας περί τινα μέρη γινομένης, ἐπεγειρομένοις δὲ ταῦτα φανερὰ τοῦτον ἔχοντα τὸν τρόπον.

9 "Et tunc in fine addit causam quare expergiscentes a somno, memorantur somnia quae vident, et non memorantur actus vigilantium, quos fecerunt dum dormierunt. Hoc determinavit in libro problematum, quem non habemus, in quo tractavit quasdam consimiles quaestiones de naturalibus. Et hoc est quod dicit, *cur vero somnia*" (Adam of Buckfield, *In De somno*, lectio 4). Adam's commentary on *De somno* is here quoted from the edition in Thomas Aquinas, *Doctoris angelici divi Thomae Aquinatis opera omnia*, vol. XXIV, ed. by Stanislas Édouard Fretté (Paris: Vivès, 1875), pp. 293–310.

Albert discusses the question "Why people upon waking do not remember waking acts that they performed in sleep but remember well other dreams" at considerable length in his *De homine*.[10] His reply starts out with an objection to Aristotle's observation in 2.456a27–29: The opposite ought to be the case, Albert claims, that is, our capacity to remember our waking acts ought to be better than our capacity to remember our dreams. The reason for this, according to Albert, is that waking acts are imprinted on unfettered (*soluti*) senses and, hence, more firmly imprinted than dreams, since these are imprinted on our senses when these are in a fettered state (*insoluti*), viz. in sleep.[11]

Albert solves the problem with a reference to the solution he has previously given to the problem of sleepwalking:[12] It is possible for some people to perform waking acts in their sleep, because while someone may be asleep in an unqualified sense (*simpliciter*), he may still be awake in a certain aspect (*secundum quid*) and so able to perform certain waking acts, such as talking and moving, in his sleep.[13] External sense impressions imprinted in the particular senses when we are awake and the senses are unfettered are more firmly imprinted than internal sense impressions imprinted in *phantasia*. However, when we sleep, the senses are unfettered only in a certain aspect or accidentally; hence, external sense impressions can be imprinted in the sleepwalker's senses only accidentally,[14] whereas interior sense impressions in sleep are imprinted *simpliciter* in *phantasia* and so also stored *simpliciter* in memory. Hence, in sleep, external sense impressions "are cut off from the interior movement of the power of *phantasia*"[15] and not stored in memory. Albert gives no reason why senses that are unfettered *per accidens* are completely incapable of receiving imprints of external sense impressions and not instead capable of doing so *per accidens* resulting in fragmentary and/or deficient impressions.

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10 Albert's *De homine*, which is the second part of his *Summa de creaturis*, was probably finished by 1242; see *Alberti Magni Opera Omnia*, vol. XXVII, II: *De homine*, ed. by Henryk Anzulewicz and Joachim R. Söder, (Münster, 2008), pp. xiv–xv. References to passages from *De homine* in this chapter all refer to Anzulewicz's and Söder's critical edition.

11 Albertus Magnus, *De homine*, 351.57–64. References to Albert's commentary on *De somno* are all to the edition in *Alberti Magni Opera Omnia*, vol. IX, ed. by Auguste Borgnet (Paris, 1890).

12 Albert treats the question under the title "Utrum aliquod animal simul dormit et vigilat" in *De homine*, 351.4–353.83. Cf. Albertus Magnus, *In De somno*, 145a–146b.

13 As mentioned in the introduction, the problem of sleepwalking, mentioned only in passing by Aristotle, generated an extensive discussion in the medieval tradition on Aristotle's definition of sleep as a state of immobilisation of the senses. The solution in the form of the distinction *simpliciter–secundum quid* was derived from Aristotle himself who refers to it as an explanation for the phenomenon of external sense impressions in sleep described in *Insomn.*, 3.462a19–25: "For in the case of waking and sleeping, when one of these states is present in the ordinary way, it is possible for the other to be present in a certain manner" (*Insomn.*, 3.462a26–27: ἐνδέχεται γὰρ τοῦ ἐγρηγορέναι καὶ καθεύδειν ἁπλῶς θατέρου ὑπάρχοντος θάτερόν πῃ ὑπάρχειν). As pointed out in Thomsen Thörnqvist, "Sleepwalking," p. 300, this distinction in Aristotle is obviously the basis for the stock solution in the medieval tradition to the problem of how sleepwalking is possible while at the same time sleep is defined as an immobilisation of the senses.

14 Albertus Magnus, *De homine*, 353.32–46.

15 "Id autem quod imprimitur in vigilia talium, non imprimitur sensibus nisi per accidens solutis, et ideo excluditur a fortiori motu interiori phantasticae virtutis" (Albertus Magnus, *De homine*, 353.38–41).

The solution given in Albert's commentary on *De somno*[16] is briefer, but the conclusion is here modified and Albert seems to aim at taking the answer one step further: Whereas dream images in sleep are fully imprinted in the common sense and *phantasia* and, hence, successfully stored there, waking acts in sleep are performed with the external sense organs which are unfettered only accidentally and so imprints on these never reach the common sense or *phantasia*. Albert seems to think that it follows from this incomplete process that sleepwalkers in some cases may remember the episodes in question when they wake up, but then believe they have performed them only in their dreams.[17]

The latter observation, which no doubt rests on empirical evidence, is well attested in modern clinical studies: Insofar as the sleepwalker has any recollection at all of his or her actions in sleep, they seem upon waking to be interpreted as part of a dream. But unlike modern neuroscientists, Albert accepts Aristotle's conclusion in *Somn. Vig.* 2.456a25 that waking acts performed in sleep are by necessity connected to an actual dream image.[18] With this in mind it should be noted that Albert provides no explanation for why the sleepwalker's memory of sleepwalking upon wakening is really an authentic memory—albeit deficient and, hence, misinterpreted—of having performed an act and not a memory of the dream that generated this act.

Albert's explanation of the difference between our capacity to remember in the waking state and in sleep presupposes a hierarchy between our capacity to remember external and internal sense impressions in waking vs. sleeping state: Memories of external sense impressions in the waking state are the most forceful. Second to these are memories of internal sense impressions (without any explicit distinction between the waking state and sleep) and last come memories of external sense impressions in sleep. External sense impressions imprinted on senses that are only accidentally active generate weaker memories than internal sense impressions. Albert's claim that

16 Albert's commentary on *De somno* is considerably later than his *Summa de creaturis*; his commentaries on the *Parva naturalia* date to *c.* 1256; see James A. Weisheipl, "Albert's Works on Natural Science (*libri naturales*) in Probable Chronological Order," in *Albertus Magnus and the Sciences: Commemorative Essays, 1980*, ed. by James A. Weisheipl (Toronto: Pontifical Institute of Mediaeval Studies, 1980), pp. 565–77 (esp. p. 570); Silvia Donati, *De nutrimento et nutrito, De sensu et sensato, cuius secundus liber est De memoria et reminiscentia*, in *Alberti Magni Opera omnia*, vol. VII, II A (Münster: Aschendorff, 2017), pp. xxiv–xxvi; Silvia Donati, "Albert the Great as a commentator of Aristotle's *De somno et vigilia*: The influence of the Arabic Tradition," in *The 'Parva naturalia' in Greek, Arabic, and Latin Aristotelianism*, ed. by Börje Bydén and Filip Radovic, Studies in the History of Philosophy of Mind 17 (Dordrecht: Springer 2018), pp. 169–209 (pp. 170–71).

17 Albertus Magnus, *In De somno*, 146a–b: "Cum enim simulacrum somnii perfecte sit impressum sensui communi et imaginationi, ibi remanet, et ideo de illo recordantur; cum vero actus vigilum sint facti per organa sensuum et illa simpliciter sint clausa et accidentaliter tantum soluta ea, quae fiunt in ipsis, non referuntur ad sensum communem et imaginationem et ideo non imprimuntur eis formae illae. Propter quod etiam recordantur eorum post somnum, sed videntur eis tantum in somno facta fuisse."

18 The conventional view that sleepwalking is the acting out of a dream has not found support in modern clinical studies. However, it is not uncommon that sleepwalkers upon waking report dreams closely connected to their actions in sleep; see, e.g., Antonio Zadra and Mathieu Pilon, "Parasomnias II: Sleep Terrors and Somnambulism", in *The Oxford Handbook of Sleep and Sleep Disorders*, ed. by Charles M. Morin and Colin A. Espie (Oxford: Oxford University Press, 2012), pp. 577–96 (p. 579).

this is due to the fact that the former only reach *phantasia* to some extent does not explain his claim that memories of internal sense impressions in sleep are weaker than impressions from external sense impressions in the waking state, but the claim that interior stimuli from sense impressions in sleep are weaker than external sense impressions perceived by the senses in the waking state is found already in Aristotle: In *Insomn.* 3.460b28–3.461a8, the inactivation of the particular senses in sleep is described as a precondition for the remnants of external (and internal) sense impressions to become perceivable:

> From the above it is plain that the movements arising from sense-impressions, both those coming from outside and those from within the body, are present not only when people are awake, but also whenever the affection called sleep comes upon them, and that they are especially apparent at that time. For in the day-time, while the senses and the intellect are functioning, they are pushed aside or obscured, like a smaller fire next to a large one, or minor pains and pleasures next to big ones, though when the latter cease, even the minor ones come to the surface. By night, however, owing to the inactivity of the special senses and their inability to function, because of the reversed flow of heat from the outer parts to the interior, they are carried inward to the starting-point of perception, and become apparent as the disturbance subsides.[19]

Several of Albert's successors attempt to reconstruct Aristotle's answer to the question why the sleepwalker upon waking has amnesia with regard to the sleepwalking episode but remembers his dreams. The commentaries here studied all rely to some extent on Albert's account in concluding that the reason that the sleepwalker does not remember his 'waking acts' on awakening is the difference in the force with which external and internal sense impressions are imprinted during sleep. And they agree that this difference is due to the fact that the sleeper's external senses were unfettered only *secundum quid* during his sleepwalking episodes whereas the internal sense impressions from his dreams were imprinted *simpliciter* in *phantasia* and so result in memories. The commentaries of Geoffrey of Aspall († 1287),[20] Peter of Auvergne

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19 ἐκ δὴ τούτων φανερὸν ὅτι οὐ μόνον ἐγρηγορότων αἱ κινήσεις αἱ ἀπὸ τῶν αἰσθημάτων γινόμεναι τῶν τε θύραθεν καὶ τῶν ἐκ τοῦ σώματος ἐνυπάρχουσιν, ἀλλὰ καὶ ὅταν γένηται τὸ πάθος τοῦτο ὃ καλεῖται ὕπνος, καὶ μᾶλλον τότε φαίνονται. μεθ' ἡμέραν μὲν γὰρ ἐκκρούονται ἐνεργουσῶν τῶν αἰσθήσεων καὶ τῆς διανοίας, καὶ ἀφανίζονται ὥσπερ παρὰ πολὺ πῦρ ἔλαττον καὶ λῦπαι καὶ ἡδοναὶ μικραὶ παρὰ μεγάλας, παυσαμένων δὲ ἐπιπολάζει καὶ τὰ μικρά· νύκτωρ δὲ δι' ἀργίαν τῶν κατὰ μόριον αἰσθήσεων καὶ ἀδυναμίαν τοῦ ἐνεργεῖν, διὰ τὸ ἐκ τῶν ἔξω εἰς τὸ ἐντὸς γίνεσθαι τὴν τοῦ θερμοῦ παλίρροιαν, ἐπὶ τὴν ἀρχὴν τῆς αἰσθήσεως καταφέρονται καὶ γίνονται φανεραὶ καθισταμένης τῆς ταραχῆς.

20 Geoffrey of Aspall otherwise in many aspects represents a branch independent of Albert. See, e.g., Sten Ebbesen, "Geoffrey of Aspall: *Quaestiones super librum De somno et vigilia*," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 83 (2014), pp. 257–341 (p. 261), and Thomsen Thörnqvist, "Sleepwalking," p. 301. However, Geoffrey is unusally close to Albert on this particular point: "Consequenter quaeritur quare tales <post> expergefactionem non memorantur operibus vigiliae, memorantur tamen aliis somniis. Videtur enim quod melius debeant memorari operibus vigiliae quam aliis somniis, quia quae fortius imprimuntur melius memorantur; sed opera vigiliae fortius imprimuntur, quia imprimuntur sensibus aliquo modo solutis; quare etc. […] Ad primum est intelligendum quod tales dormiunt simpliciter

(† 1304)[21] and Radulphus Brito († 1320/1)[22] bring nothing new to the table. But in Simon of Faversham's († 1306) question commentary[23] and the *expositio* of Walter Burley (*c.* 1275–1346),[24] the discussion of the problem becomes considerably more independent of Albert.[25]

Whereas Albert refers to his previous conclusion that the sleeper's senses are unfettered to a limited extent, Simon and Burley categorically state that external sense impressions in sleep leave no imprints at all because the external senses are inactivated in sleep.[26] Hence, the question why no imprints at all (rather than imprints of limited quality and/or quantity) reach *phantasia* via the senses when these are activated *secundum quid* in sleep is here not an issue: Just as there is a hierarchy in being from the lowest to the highest, there is a hierarchy of cognitive powers. In the hierarchy of cognitive powers, the exterior senses are the least perfect. No sensible species can be received in a higher cognitive power unless it has first been received in an inferior power. But, they claim, no sensible species can be received by the exterior senses in sleep. Thus, no sensible species can be received by the superior *virtus memorativa*.[27]

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et vigilant secundum quid. Ideo impressiones somniorum quae fiunt in organis interioribus, ut in organo phantasticae, fiunt simpliciter, et ideo bene memorantur somniis. Opera autem vigiliae non imprimuntur sensibus solutis simpliciter sed solum secundum quid, et ideo non imprimuntur fortiter sed valde debiliter; et ideo non memora<n>tur huiusmodi etc." (Geoffrey of Aspall, *In De somno*, pp. 307–308).

21 Peter of Auvergne's commentary is edited in Kevin White, "Two Studies Related to St Thomas Aquinas' Commentary on Aristotle's *De sensu et sensato* together with an Edition of Peter of Auvergne's *Quaestiones super parva naturalia*" (Unpublished doctoral thesis, University of Ottawa, 1986), pp. 203–20. On the problem of amnesia after sleepwalking, see 216.13–217.40.

22 See Sten Ebbesen, "Radulphus Brito on Memory and Dreams. An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin,* 85 (2016), p. 54 (part of the *quaestio* "Utrum dormientes possint exercere opera vigiliantium").

23 See Sten Ebbesen, "Simon of Faversham: *Quaestiones super librum De somno et vigilia*: An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 83 (2013), pp. 90–145 (pp. 120–23): "Utrum dormientes facientes opera vigiliae possint memorari illorum operum."

24 See Christina Thomsen Thörnqvist, "Walter Burley's Expositio on Aristotle's Treatises on Sleep and Dreaming: An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 83 (2014), pp. 379–515 (pp. 457.9–460.3): "Utrum dormientes facientes opera uigiliae possunt recordari eorum."

25 I have elsewhere argued that the two works are so close that we must conclude that Burley is either drawing directly on Simon's work or that they are both drawing on a common source; see Thomsen Thörnqvist, "Burley's *Expositio,*" pp. 385–87.

26 Simon of Faversham here refers to *Insomn.*, 1.458b7: "opera enim in somno species suas in sensus exteriores imprimere non possunt, quia in hora somni omnes sensus exteriores ligantur et immobilitantur, et per consequens nec in virtute memorativa. Unde dicit Philosophus: dormiens oculo non potest videre" (Simon of Faversham, *Quaest. De somno*, p. 123). Cf. Walter Burley, *Exp. De somno*, pp. 457.18–458.7; 459.19–22.

27 Cf., e.g., Siger of Brabant(?), *Quaest. Somn.Vig.*, MS Bibl. Angel. 549, f. 103rb: "Dicendum quod species non reperiuntur rerum sensibilium in uirtute superiori[s] nisi mediante uirtute inferiori; unde, cum in dormientibus sint sensus ligati particulares, non possunt species sensibiles operationum suarum recipi in sensibus particularibus, quare nec in memoria. Verumtamen simulacrum rei fuit primo in phantastica uirtute, et ideo non est necesse ad hoc, quod de simulacro habeatur memoria post somnum, quod ueniat ad memoriam per uirtutes sensitiuas, sed a uirtute imaginatiua [uirtutibus imaginatiuam *ms*] ad memoriam deferatur"; Anon. Angelicanus, *Quaest. Somn.Vig.*, MS Bibl. Angel. 549, f. 107rb: "Dicendum, quod exercentes opera uigiliae somniorum recordari possunt, operum autem nequaquam nisi aliquo sensu

Simon anticipates the objection: A *phantasma* (and so a dream image[28]) is a "movement produced by sensation actively operating" (*De an.* 3.429a1–2[29]) and replies: While it is true that the *virtus phantastica* cannot receive anything that has not previously been received by the senses, it can produce a dream image of something that has never been received by the senses "according to that manner by which we dream it" (*secundum illum modum secundum quem somniamus*), such as a mountain of gold or a goatstag. The two examples are found in both commentaries, but Simon in this connection gives a more elaborate account where he states that he follows Averroes in distinguishing between *phantasmata* composed of objects that exist outside the mind and *phantasmata* composed of objects that do not.[30] The latter category is divided into possible objects (*phantasmata componibilium*), such as a mountain of gold, and impossible objects (*phantasmata nec rerum compositarum nec componibilium*), such as the goatstag. In all three cases, however, the *phantasma* does exist in the senses, albeit in the latter two categories only *secundum partes*. No one has seen a mountain of gold, but both a mountain and gold have existed in the senses, and while a goatstag has never been perceived by the senses, a lion, a goat and a stag have all existed in the senses. A dream, Simon concludes, is a *phantasma* of sensible objects that results from the interior senses being active in sleep.[31] There

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soluto. Et causa primi est, quia memoria est comprehensio sensibilis sub ratione, qua prius comprehensum. Cuiuscumque ergo est memoria oportet illud prius esse comprehensum per sensum, sed somnia comprehenduntur a uirtute phantastica, et ideo possunt homines recordari somniorum, factorum autem non recordatur, quia non potest aliud cadere in memoria, nisi sit aliquid factorum per sensum. Opera autem in sensu non sunt facta; ergo non potest aliquis operum recordari"; John of Jandun, *Quaest. sup. parvis naturalibus* (Venice, 155), f. 38rb: "Tertio posset aliquis rationabiliter dubitare, quare dormientes similiter cum fecerunt opera uigilantium expergefacti memorantur de somno, sed de executione exeriori talium operum nullatenus memorantur; immo negant talia opera se fecisse. Et hic potest dici, quod apparitio somnialis siue simulacrum et apprehensio contingens in somno, cum immutat sensum communem aut cogitatiuam, potest immutare memoriam, et impressio facta in memoria potest in ea reseruari usque ad uigiliam, et sic in uigilia potest homo memorari huius apparitionis somnialis, sed opera exterius existentia, ut motus membris exterioribus inexistens, non potest facere aliquam immutationem in memoria, quia memoria aut imaginatiua, quae sunt reseruatiuae uirtutes, non immutantur ab aliquo exterius existente, nisi prius immutatis sensibus particularibus et sensu communi, et quia in somno sensus particulares non immutantur a rebus exterioribus ita, quod eas percipiant, ideo nihil peruenit ad imaginatiuam et memoriam de huiusmodi operationibus exterioribus, et sic non potest homo memorari de illis."
I am currently preparing critical editions of both of the commentaries on *Somn.Vig., Insomn.* and *Div. Somn.* found in MS Roma, Bibl. Angel. 549.

28 See *Insomn.*, 3.462a15–16: ἐκ δὴ τούτων ἁπάντων δεῖ συλλογίσασθαι ὅτι ἐστὶ τὸ ἐνύπνιον φάντασμα μέν τι καὶ ἐν ὕπνῳ.

29 Translation by Walter Stanley Hett, *Aristotle On The Soul. Parva naturalia. On Breath* (Cambridge, Mass.: Harvard University Press, 1957), p. 163. Aristotle, *De anima*, ed. by David Ross (Oxford: Clarendon Press, 1961): κίνησις ὑπὸ τῆς αἰσθήσεως τῆς κατ' ἐνέργειαν γιγνομένη.

30 I have been unable to verify Simon's reference in Averroes, but note *Averrois Cordubensis Commentarium Magnum in Aristotelis De anima libros*, ed. by F. Stuart Crawford (Cambridge, MA: Medieval Academy of America, 1953), pp. 374–75. I am grateful to Jordan Lavender for drawing my attention to this passage.

31 Both Simon of Faversham, *Quaest. De somno*, p. 122, and Walter Burley, *Exp. De somno*, p. 459.1–7; pp. 8–12, here refer to (1) Averroes' description of dreaming as a process of interior perception where the movement in waking from the exterior senses to the interior powers is reversed in sleep where evaporation from the organ of *phantasia* moves via the common sense to the particular senses (Averroes, *Averrois Cordubensis*

can be a memory in act of anything of which there is a a *phantasma* in act; the image (*apparitio*) of a *phantasma* exists in act in the dream; *ergo* etc. In contrast to this active interior perception in sleep, the exterior senses are inactive in sleep and incapable of receiving imprints that would produce *phantasmata* of exterior sense objects. Hence, memories of dream images are all memories of objects that have existed in the senses, but they have all ultimately been acquired in the waking state. In the sleeping state, the senses are active *secundum quid*, which makes certain waking acts such as sleepwalking possible,[32] but the level of activity is not sufficiently high for the senses to receive external sense impressions forceful enough to result in *phantasmata* and subsequent memories.

But if perception of external sense impressions is impossible in sleep, because the external senses are incapable of receiving sensory imprints when inactivated, how are we to understand the passage in *Insomn.* 3.462a16–32, where Aristotle describes the sleeper's occasional memory of external sense impressions in sleep in contrast to dreams? Two types of evidence are given that the sleeper's external senses have been capable of receiving external sense impressions: (1) In cases where the stimuli continue after the sleeper has woken up, he can testify that he has perceived it already in sleep and recognised it upon waking; (2) the sleeper can in some cases respond to questions that he is asked while still asleep.[33]

In *Insomn.* 3.461b30–462a8, Aristotle discusses how we are sometimes aware that a dream is a likeness and not an authentic impression of a sensible object, whereas sometimes, due to the power of sleep, we are deluded and believe that the dream is an authentic impression:

> Accordingly, just as for someone who was unaware of a finger being pressed beneath his eye, a single object would not only appear two, but would actually be judged to be two, whereas for someone aware of it, it will appear but will not be judged to be two; so during periods of sleep: if someone perceives that he is asleep, i.e., that it is a sleeping state in which the perception is occurring, then there is an appearance, but something in him says that it appears to be Coriscus, and yet Coriscus is not there. (For often something in the soul of a person who

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Compendia librorum Aristotelis qui Parva naturalia vocantur, ed. by Emily L. Shields and Harry Blumberg (Cambridge, MA.: Medieval Academy of America, 1949), pp. 98.65–99.2), and (2) Albert's remark that the fact that we very rarely dream that we perceive a certain smell but more often see, hear or taste things in our sleep is due to the fact that smell is our weakest sense, and the weaker the sense, the weaker the imprints of sense impressions and fewer the dreams (as pointed out in both editions, the references are to Averroes, *In De somno*, 98.65–99.2, and Albertus Magnus, *In De somno*, 158a, respectively).

32 For this solution in Simon of Faversham, see *Quaest. De somno*, pp. 118–19; cf. Walter Burley, *Exp. De somno*, p. 455.8–17.

33 For (1), see the passage quoted above on p. 187. For (2), see *Insomn.*, 3.462a25–26: ἔνιοι δὲ καὶ ἀποκρίνονται ἐρωτώμενοι. For an example of the latter phenomen in modern clinical studies, see, e.g., Claudio L. Bassetti, "Sleeptalking: Dissociation Between 'Body Sleep' and 'Mind Sleep,'" in *The Neurology of Consciousness: Cognitive Neuroscience and Neuropathology*, ed. Steven Laureys, Olivia Gosseries and Giulio Tononi, 2nd ed. (Amsterdam: Elsevier Academic Press, 2016), p. 130.

> is asleep says that what is appearing is a dream.) But if he is unaware that he is asleep, then nothing will contradict the appearance (*phantasia*).[34]

In *De homine*, Albert comments on Aristotle's observation and states that the type of delusion described is due either to the power of sleep (because although neither the common sense nor rationality is immobilised in sleep, their capacity is limited[35]) or to a weakness of the sleeper's state of sleep. The latter is the case, Albert claims, when the sleeper is close to waking or when he otherwise sleeps in a weak way. For proof that this type of delusion occurs, Albert explicitly relies on *Insomn.* 3.462a19–25. His view of the various examples of external perception in sleep in Aristotle is clearly that the reason why external sense impressions may reach the sleeper in these cases is that his sleep is weak and that an incipient awakening has begun its 'unfettering' of the senses.[36]

Albert's rather elaborate comment on *Insomn.* 3.462a19–25 is not matched by a corresponding interest in the later tradition. The commentators here studied typically comment on the passage more or less in passing and only in connection with their discussions of Aristotle's remark on sleepwalking, where Aristotle's mention of the

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34 ὥσπερ οὖν εἴ τινα λανθάνοι ὑποβαλλόμενος ὁ δάκτυλος τῷ ὀφθαλμῷ, οὐ μόνον φανεῖται ἀλλὰ καὶ δόξει εἶναι δύο τὸ ἕν, ἂν δὲ μὴ λανθάνῃ, φανεῖται μὲν οὐ δόξει δέ, οὕτω καὶ ἐν τοῖς ὕπνοις, ἐὰν μὲν αἰσθάνηται ὅτι καθεύδει, καὶ τοῦ πάθους ἐν ᾧ ἡ αἴσθησις τοῦ ὑπνωτικοῦ, φαίνεται μέν, λέγει δέ τι ἐν αὐτῷ ὅτι φαίνεται μὲν Κορίσκος, οὐκ ἔστι δὲ ὁ Κορίσκος (πολλάκις γὰρ καθεύδοντος λέγει τι ἐν τῇ ψυχῇ ὅτι ἐνύπνιον τὸ φαινόμενον)· ἐὰν δὲ λανθάνῃ ὅτι καθεύδει, οὐδὲν ἀντιφήσει τῇ φαντασίᾳ.

35 "Potentia autem somni dicitur primo quidem a quadam immobilitate sensus communis, et secundo ab immobilitate rationis. Sensus enim communis licet non immobilitetur in somno quoad actum interiorem, tamen immobilitatur quoad exteriorem et quoad comparationem interioris ad exteriorem; et hoc dicitur maior potentia somni. Ratio etiam licet non immobilitetur a somno per se, tamen immobilitatur per accidens." Albertus Magnus, *De homine*, 379.12–19.

36 Albert comments on this aspect of *Insomn.*, 3.462a16–32 also when expounding on the definition of the dream in his commentary on the *De somno*, 174a–b. Here, weak sleep results in weak perception: "Quod contingit eadem causa quam diximus, quia videlicet somnus ligat sensum, et quia sensus istorum debili somno et tenui ligati sunt, debiliter percipiunt. Et propter deceptionem hanc debilitatem ad sensibile deferunt et credunt, quod hoc sit ex longinquitate sensibilis imitantis sensum." Cf. Walter Burley, *Exp. Somn.Vig.*, 483.22–484.3 (refuting in *quaestio* VIII.1 the conclusion that dreams are affections of the exterior senses): "Ad tertiam probationem dicitur, quod non quaecumque apparitio est somnium, sed solum illa apparitio, quae est in simpliciter dormiente. Unde illi, quibus apparet, quod uideant lumen lucernae, et postea cognoscunt, non dormiunt simpliciter sed languide et imperfecte"; James of Douai, *Exp. et Quaest. Somn.Vig.*, ed. by Sten Ebbesen in "James of Douai on Dreams," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 84 (2015), pp. 22–92 (68.4–15): "Iterum non omne phantasma quod apparet in somno est somnium, sicut phantasma quod apparet languide dormientibus, sicut declarat Philosophus. Nam primum, sc. in principio dormitionis, accidit aliquibus, sc. languide dormientibus, sentire aliquo modo sonos, lumen, saporem et tactum, hoc est tangibile. Hoc tamen accidit eis languide, unde languide illa percipiunt, et quasi illa de longe perciperent, et debiliter ista percipiunt, hoc est quia sensus in istis non sunt usquequaque soluti, unde illa apparitio non est somnium, quia iam aliqui respicientes et mox excitati statim cognoverunt expergefacti quod lumen lucernae quod videbant languide, et quod arbitrabantur esse lumen, erat lumen lucernae secundum veritatem. Et similiter aliqui languide percipientes sonum gallorum et canum expergefacti cognoverunt manifeste quod erant soni gallorum et canum, sicut eis apparebat in principio dormitionis. Et tales apparitiones sine dubio non sunt somnia, eo quod tales apparitiones a re extra causantur."

sleeper who is able to answer a question becomes one of the standard examples of a sleeper performing a 'waking act'. Some of the commentators discuss how the phenomenon is possible given the fact that the external senses are inactivated in sleep, and at least three explanations are offered for why the phenomenon cannot be regarded as evidence of authentic external perception in sleep: (1) it is due to sheer coincidence, (2) it is due to some influence from above, or (3) the sleeper is not sleeping *simpliciter* and so the external senses are not inactivated as in sleep proper.[37]

In explanation (3), which is the only attempt to give a physiological explanation, the attributes used by Aristotle to describe the weakness of the sense impressions are transfered to the nature of the sleep. In the commentary on *De somno* ascribed to Siger of Brabant and in Simon of Faversham's question commentary, as well as in several other of the medieval commentaries, the sleeper who is able to answer questions in his sleep is sleeping *languide*.[38] But Aristotle's sleepers in 3.462a19–25 "have the experience of actually perceiving, in a certain manner (αἰσθάνεσθαί πῃ) … albeit faintly (ἀσθενικῶς) and as if from a distance,"[39] they see "with their eyes partly open … dimly (ἠρέμα) in their sleep … the light of the lamp" and hear "faintly (ἠρέμα) the noise of cocks and dogs." There is no explicit indication in the text that the sleeper is close to waking up and Aristotle is quite clear that the sleeper is really asleep and not awake.[40] In Aristotle, it is in these cases that perception is affected and weakened by sleep, not sleep that is weakened and, consequently, affected by perception.[41]

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37 See, e.g., Siger of Brabant, *Quaest. De somno*, MS Bayerische Staatsbibl. Clm. 9559, f. 48va; Simon of Faversham, *Quaest. De somno*, pp. 119–20; Walter Burley, *Exp. De somno*, 480.3–6 with 483.22–484.3; Radulphus Brito, *Quaest. De somno*, p. 54.

38 Siger of Brabant(?), *Quaest. De somno*, MS Bayerische Staatsbibl. Clm. 9559, f. 48va; Simon of Faversham, *Quaest. De somno*, pp. 119–20. Cf. also Radulphus Brito, *Quaest. De somno*, p. 54, and note Brito's remark on the sleeper's inability to form memories of the episode: "Etiam in principio somni, antequam aliqui perfecte dormiant, cum sensus non sunt perfecte ligati, tunc isti respondent ad interrogata et postea non recolunt se respondisse, quia istud non est perfecte sensatum, et ideo non immutatur ab isto ipsa memoria."

39 Notice the rendering of the Greek 'ἀσθενικῶς' in the Latin translation: "nam primum quidem aliquibus accidit et sentire aliquo modo et sonos et lumen et saporem et tactum, languide quidem et veluti de longe" (*Insomn.*, 3.462a19–21 = *Aristotelis 'De insomniis' et 'De divinatione per somnum'. A new edition of the Greek Text with the Latin Translations*, ed. by Hendrik Joan Drossaart Lulofs (Leiden: Brill, 1947), 28/29.12–15).

40 See, e.g., *Insomn.*, 3.462a26–27 (quoted in n. 13 above).

41 *Div.Somn.*, 1.463a7–17 (quoted above, pp. 187–88) describes sense impressions that originate from physical movements in the body and so are external in relation to *phantasmata* as interior stimuli. Albert comments on the passage in both his commentaries; see, e.g., Albertus Magnus, *In De somno*, 168b (as a *causa deceptionis in somno*); 198b (as a physical cause of dreaming; cf. *De homine*, 384.26–50). Neither in Albert, nor in any of the medieval commentaries here studied, does any connection seem to be made between the various phenomena of external sense perception in sleep described in *Insomn.*, 3.462a19–31, and *Div.Somn.*, 1.463a7–17, respectively. For medieval expositions of the latter passage after Albert, see Geoffrey of Aspall, *In De somno*, p. 335; Simon of Faversham, *Quaest. De somno*, p. 142; Walter Burley, *Exp. Somn.Vig.*, 490.21–491.7; 503.1–3; 510.15–511.3; James of Douai, *Exp. et Quaest. Somn.Vig.*, 77.1–18.

Without the ability to recall memories of authentic external sense impressions perceived in sleep, the sleeper would not be able to identify the sense impression received upon waking as the same as the one he has previously received in sleep. The same modifying remark by Aristotle that is interpreted by Albert and his successors as an explanation of how sleepwalking is possible seems at closer inspection to be in opposition to their standard reconstruction of Aristotle's reply to the question of memories of sleepwalking vs. memories of dreams.

3. Dreamless People or Forgetful? Memories of Internal Sense Impressions in Sleep

In the introduction to *Somn.Vig.*, Aristotle draws an outline of the content of all three treatises on sleep and dreams. He does so in the form of a list of questions. Among the questions to be treated in *Insomn.* we find the following.

> In addition, we must ask what a dream is, and from what cause sleepers sometimes dream but sometimes not. Or is it the case that people always dream when asleep, but do not remember? And from what cause does it happen, if it does?[42]

In the response, Aristotle concludes in the final passage of *Insomn.* that some people never dream.[43] The cause for this rare condition, Aristotle assumes, is the same as for other temporary circumstances under which human beings do not dream: When the upward evaporation that causes sleep, and so also the subsequent movement that follows when the heat descends again, are unusually extensive, no dream image is produced:

> There have been cases of people who have not experienced a single dream in the course of a life-time, or who have experienced one when well advanced in years, without having done so before. The reason for the non-occurrence appears akin to that which operates in the case of infants and after food. Thus, it is intelligible that no appearance (*phantasma*) should appear to those so constituted by nature that much exhalation is carried up to the upper region, which produces an abundance of motion upon returning downward.[44]

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42 πρὸς δὲ τούτοις τί ἐστι τὸ ἐνύπνιον, καὶ διὰ τίνα αἰτίαν οἱ καθεύδοντες ὁτὲ μὲν ὀνειρώττουσιν ὁτὲ δὲ οὔ, ἢ συμβαίνει μὲν ἀεὶ τοῖς καθεύδουσιν ἐνύπνιάζειν, ἀλλ' οὐ μνημονεύουσιν, καὶ εἰ τοῦτο γίγνεται, διὰ τίνα αἰτίαν γίγνεται (*Somn.Vig.*, 1.453b17–20).

43 As pointed out by Gallop, *Sleep and Dreams*, p. 155, there is a parallel in the *Historia animalium, IV,* 10.537b16–21 (see Gallop's appendix, pp. 178–79).

44 *Insomn.*, 3.462b1–8: ἤδη δέ τισι συμβέβηκεν μηδὲν ἐνύπνιον ἑωρακέναι κατὰ τὸν βίον, τοῖς δὲ πόρρω που προελθούσης τῆς ἡλικίας ἰδεῖν πρότερον μὴ ἑωρακόσιν. τὸ δ' αἴτιον τοῦ μὴ γίνεσθαι παραπλήσιον φαίνεται τῷ ἐπὶ τῶν παιδίων καὶ μετὰ τὴν τροφήν. ὅσοις γὰρ συνέστηκεν ἡ φύσις ὥστε πολλὴν ἀναθυμίασιν πρὸς τὸν ἄνω τόπον ἀναφέρεσθαι, ἢ πάλιν καταφερομένη ποιεῖ πλῆθος κινήσεως, εὐλόγως τούτοις οὐδὲν φαίνεται φάντασμα. Cf. also *Insomn.*, 3.461a14–25.

Since the hypothesis here is that in these cases no *phantasma* is formed at all, the possibility that the sleeper has actually dreamt but forgotten his dream is ruled out.[45] Gallop points out that Aristotle's phrasing on two occasions indicates that he must have believed that we sometime fail to remember our dreams: "This is implied by his speaking of applying our minds and 'trying to remember' (458b19; cf. 462a9–11). If it takes a conscious effort to remember something, that effort may be more or less successful, or may fail altogether."[46] But, strictly speaking, in none of these cases is there any indication that Aristotle considers that the effort could fail.[47]

Albert structures his exposition of *Insomn.* in the *Summa* in accordance with Aristotle's list of questions in the introduction to *Somn.Vig.*[48] Hence, both the question "Why some people dream and others do not?" and "Why those who do dream sometimes remember their dreams and sometimes not?" are included in his work.[49] However, none of the three *articuli* supposedly devoted to the latter question actually treats the problem announced: Two deal with various aspects of dream deception[50] and one with the question whether we are more likely to forget knowledge in our sleep than when we are awake.[51] The former question is treated under the heading "Why do some people not dream in their entire life?," but Albert does not consider amnesia as an explanation, that is, that some people just appear never to dream; instead, he elaborates on Aristotle's physiological explanations of temporary and permanent absence of dreams, and only briefly adds to this explanation "ex parte corporis"[52] a "causa ex parte animae": a weakness of the *virtus imaginativa* that makes it incapable of forming sufficiently forceful dream images.[53]

In his later commentary on the *Parva naturalia*, Albert has obviously found a way to give a fuller reply to the question in *Somn.Vig.* 1.453b17–20, a reply that does

45 I disagree here with Gallop who claims (*Sleep and Dreams*, p. 155) that the last part of the question in *Somn. Vig.*, 1.453b17–20, is left unanswered in *Insomn.*, 3.462a31–b11: "Aristotle does not here consider whether their supposed failure to dream is genuine or whether they may be presumed to have had dreams and forgotten them."

46 Gallop, *Sleep and Dreams*, p. 51.

47 *Insomn.*, 1.458b17–20: οὕτω καὶ ἐν τοῖς ὕπνοις παρὰ τὰ φαντάσματα ἐνίοτε ἄλλα ἐννοοῦμεν. φανείη δ' ἄν τῳ τοῦτο, εἴ τις προσέχοι τὸν νοῦν καὶ πειρῷτο μνημονεύειν ἀναστάς; 3.462a8–12: ὅτι δὲ ἀληθῆ λέγομεν καὶ εἰσὶ κινήσεις φανταστικαὶ ἐν τοῖς αἰσθητηρίοις, δῆλον, ἐάν τις προσέχων πειρᾶται μνημονεύειν ἃ πάσχομεν καταφερόμενοί τε καὶ ἐγειρόμενοι· ἐνίοτε γὰρ τὰ φαινόμενα εἴδωλα καθεύδοντι φωράσει ἐγειρόμενος κινήσεις οὔσας ἐν τοῖς αἰσθητηρίοις.

48 Albertus Magnus, *De homine*, 318.12–17: "Deinde movet Aristoteles de somnio septem quaestiones, scilicet 'quid sit somnium, et propter quam causam dormientes quidam somniant, quidam vero non, et quare quidam qui somniant, quandoque non recolunt et quandoque recordantur, et si contingit futura praevidere in somnio vel non, et qualiter hoc contingit; et utrum futura ab homine prospiciantur solum, vel quorundam daemonum habeant causam; et utrum a natura fiant vel ab eventu.' Has quaestiones determinat Aristoteles in libro De somno et vigilia, et nos disputabimus de eisdem."

49 Albertus Magnus, *De homine*, 378.1–381.17.

50 Albertus Magnus, *De homine*, 378.11–380.11; 380.12–38.

51 Albertus Magnus, *De homine*, 380.39–381.17.

52 Albertus Magnus, *De homine*, 376.24–33.

53 Albertus Magnus, *De homine*, 376.34–37: "Causa autem quae est ex parte animae, est debilitas virtutis imaginativae, quae non potest formare imagines fortiter moventes."

not merely elaborate on Aristotle's theory: In the commentary on *Insomn.*, Albert discusses not only those who never dream, but also those who do dream, but forget their dreams.[54] The first matter is here treated in a much more compendious way than in the *Summa* and in a way very close to Aristotle. As for the the latter category, however, Albert explains: There are people who have frequent dreams, but forget them. The reason why they forget their dreams is that in their case certain stronger movements thrust the dream images aside and prevent the sleeper from perceiving them. This is the reason, Albert claims, why people who move their bodies vigorously after experiencing their dream but before recollecting it forget their dream completely.[55]

Aristotle's mention of people who do not dream left few traces in the early medieval commentaries examined here. James of Douai's brief exposition of it is little more than a paraphrase of Aristotle.[56] In Geoffrey of Aspall's question commentary we find the *quaestio* "Why some upon waking, having stretched or turned, do not remember dreaming, but remember it well if they lie still" (*Quare aliquis expergefactus si statim cum somniaverit moveat se extendendo corpus vel vertendo se ad alius latus non memoratur se somniasse; si autem quiescat bene memoratur*), which is briefly answered with an explanation very close to Albert's: External movements in the waking state are stronger than both the movement of *phantasia* that produces dream images and the flow of *phantasmata* from the sensitive power to the common sense. Hence, if the sleeper moves vigorously after waking up, these forceful exterior movements will eliminate the weaker interior ones.[57]

4. Does the Reconstruction Hold?

Albert's reconstruction of Aristotle's answer to the question of why sleepwalkers remember their dreams but not having sleepwalked, that is, the explanation that external sense impressions leave insufficient traces in *phantasia* and hence in memory,

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54 Albertus Magnus, *In De somno*, 175a–b.

55 Albertus Magnus, *In De somno*, 175b: "Quidam sunt, qui multum somniant et continue suorum somniorum patiuntur oblivionem: quod ex illa causa contingit, quia pro certo motus fortiores aliqui excludunt perceptionem imaginationum apparentium in somnis: et ideo qui continue post somnium fortiter moventur corpore antequam memorantur de somno, omnino obliviscuntur, praecipue si somnium in fine somni viderint, sicut frequenter omnes homines somniare consueverunt."

56 James of Douai, *Exp. et Quaest. Somn.Vig.*, 68.31–69.19.

57 Geoffrey of Aspall, *Quaest. De somno*, pp. 307–308: "Quaeritur etiam quare aliquis experfegactus si statim cum somniaverit moveat se extendendo corpus vel vertendo se ad aliud latus non memoratur se somniasse; si autem quiescat bene memoratur […] Ad aliud quod quaeritur iuxta hoc dicendum quod motus sive fluxus simulacrorum ab organo virtutis sensitivae ad organum sensus communis [debilis] sive phantasticae mediantibus quibus fit somnium est motus <debilis>, [vero] unde impeditur et quasi annihilatur a motibus exterioribus qui fiunt in vigilando; unde statim postquam expergiscuntur animalia si mover<i>nt se in extendendo corpus vel etiam vertendo ad aliud latus, isti motus fortiores impediunt et quasi annihilant motus debiliores."
As an example of a modern study on this issue, see, e.g., Bastien Herlin, Smaranda Leu-Semenescu, Charlotte Chaumereuil and Isabelle Arnulf, "Evidence That Non-Dreamers Do Dream: A REM Sleep Behaviour Disorder Model," *Journal of Sleep Research*, 24:6 (2015), pp. 602–609.

seems to be accepted without much further ado in the early Latin tradition. The commentators differ in their assumptions regarding whether external stimuli leave no imprints in the particular senses or imprints that are too weak to generate memories, but the result is the same in either case and so the former statement may well have been regarded as merely a simplification of the latter. This difference aside, Albert's reconstruction is generally accepted by his successors.

There is no direct support for Albert's reconstruction in *De memoria*. Aristotle's explanation that the very young and the very old as well as "the very quick" and "the very slow" tend to have deficient memories even under strong sense impressions because both categories are "in a state of flux" is probably the most relevant passage.[58] But when John Buridan enters the picture, the flaw in the reconstruction is noticed: While initially agreeing with the explanation that the sleepwalker cannot remember his 'waking acts' because his particular senses are shut down in sleep and so cannot receive sense impressions forceful enough to be transferred to the common sense or to *phantasia*, Buridan expresses doubts about the validity of the explanation: Someone has told him that he was once pursued by a sleeping man who had risen from his bed and drawn his sword.[59] This could hardly be possible, Buridan claims, without the sleeper having some external perception. Buridan finds support for his conclusion that the reason for the sleepwalker's inability to create memories is not, as several of his predecessors have claimed, a complete inability to receive external sense impressions in sleep in *Insomn.* 3.462a16–31. The solution, Buridan concludes, is that *phantasia* indeed has the ability to receive external sense impressions even in sleep, but that these imprints are not sufficiently strong to move the *sensus communis* and hence too weak to generate memories.[60] Hence, the connection seems here for

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58 See *Mem.*, 1.450a32–1.450b11: διὸ καὶ τοῖς μὲν ἐν κινήσει πολλῇ διὰ πάθος ἢ δι' ἡλικίαν οὔσιν οὐ γίγνεται μνήμη, καθάπερ ἂν εἰς ὕδωρ ῥέον ἐμπιπτούσης τῆς κινήσεως καὶ τῆς σφραγῖδος· τοῖς δὲ διὰ τὸ ψήχεσθαι, καθάπερ τὰ παλαιὰ τῶν οἰκοδομημάτων, καὶ διὰ σκληρότητα τοῦ δεχομένου τὸ πάθος οὐκ ἐγγίγνεται ὁ τύπος. διόπερ οἵ τε σφόδρα νέοι καὶ οἱ γέροντες ἀμνήμονές εἰσιν· ῥέουσι γὰρ οἱ μὲν διὰ τὴν αὔξησιν, οἱ δὲ διὰ τὴν φθίσιν. ὁμοίως δὲ καὶ οἱ λίαν ταχεῖς καὶ οἱ λίαν βραδεῖς οὐδέτεροι φαίνονται μνήμονες· οἱ μὲν γάρ εἰσιν ὑγρότεροι τοῦ δέοντος, οἱ δὲ σκληρότεροι· τοῖς μὲν οὖν οὐ μένει τὸ φάντασμα ἐν τῇ ψυχῇ, τῶν δ' οὐχ ἅπτεται = "This is also the reason why those who are in much movement because of an affection or because of age do not come to have memory, as though the movement produced by sensation and the seal were impinged on running water, while others do not receive the impression because of damage in that which is receiving the affection—similar to the damage of old walls in buildings—and because of the hardness in it. Therefore, both the very young and old people have weak memories: for the former are fluctuating because of growth, the latter because of decay. Similarly neither those people that are too quick-witted nor those that are too slow-witted seem to possess good memory: the former are moister than what is needed, the latter are harder; thus the image does not remain in the soul of the former, while it does not make real contact with the latter' (David Bloch, *Aristotle on Memory and Recollection: Text, Translation, Interpretation, and Reception in Western Scholasticism* (Leiden–Boston: Brill, 2007) pp. 30–31.

59 Since Albert, a man getting up from bed while still asleep and tracking down his enemy to kill him was the standard example of a sleeper performing a 'waking act' in the Latin tradition; see Thomsen Thörnqvist, "Sleepwalking," p. 299.

60 Buridan's *Parva naturalia* seems to recently have been edited by Maciej Stanek in the unpublished *Jana Burydana*: *Quaestiones super Parva naturalia Aristotelis. Edycja krytycna i analiza historyczno-filozoficzna* (Katowice, 2015). As I have unfortunately not had access to Stanek's edition, Buridan's exposition is

the first time to be made between the problem of inability to remember sleepwalking identified in *Somn.Vig.* 2.456a24–29 and the examples of external sense impressions in sleep in *Insomn.* 3.462a16–31. However, the fact that, on waking, the sleeper in the latter account does have a memory of the external sense impressions that he received in sleep continues to go unnoticed.

5. Conclusion

If Aristotle's answer to the question in *Somn.Vig.* 2.456a27–29 why we remember our dreams but not the waking acts we perform in our sleep ever materialised, it may well have been in line with what Albert and his successors proposed, but the phrasing of the question and the fact that the examples of external sense impressions in sleep in *Insomn.* 3.462a19–31 and *Div.Somn.* 1.463a7–17 seem to be adduced by Aristotle as rare exceptions to the conclusion that no living being can have sensation in sleep[61] suggest that the answer must have more or less ruled out the possibility of external sense impressions in sleep being stored as memories. The neuroscience of today would have substantial objections to such a categorical statement. The traditional belief that sleepwalkers upon waking have no memory of their acts and no perception of external sense impressions during the event has been challenged by numerous modern studies. These demonstrate that sleepwalkers often have some perceptual awareness of their surroundings during the sleepwalking episode and also some memory of it after waking up.[62]

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here quoted from the Lockert edition: *Quaestiones et decisiones physicales insignium virorum Alberti de Saxonia … Thimonis … Buridani in Aristotelis … Librum de Somno et Vigilia* (Paris, 1516), p. XLVIIrA–B: "Et ideo probabiliter potest dici sicut Aristoteles de subdormientibus, qui non perfecte dormiunt, quod lente et debiliter audiunt uel sentiunt exteriora ita, quod aliquando respondent ad interrogata, sic etiam potest imaginari, quod talibus non sunt omnino perfecte sensus exteriores clausi; ideo per illos possunt se aliqualiter dirigere ad talia facienda, una cum rememorationibus et intelligentiis concurrentibus. Sed tunc quaeritur, quare igitur isti non rememorantur illorum operum exteriorum. Solutio potest dici, quod impressiones factae a sensibus interioribus ad sensus exteriores sunt ita debiles tunc, quod non possunt facere in phantasia impressiones sufficientes ad postea iterum mouendum notabiliter sensum communem; ideo non fit talium rememoratio."

61 *Somn.Vig.*, 2.455a9–12: ἀδύνατον δ' ἐστὶν ἁπλῶς ὁποιανοῦν αἴσθησιν αἰσθάνεσθαι τὸ καθεῦδον ζῷον, φανερὸν ὅτι πάσαις ἀναγκαῖον ὑπάρχειν τὸ αὐτὸ πάθος ἐν τῷ καλουμένῳ ὕπνῳ· εἰ γὰρ τῇ μέν, τῇ δὲ μή, ταύτῃ καθεῦδον αἰσθήσεται, τοῦτο δ' ἀδύνατον ("Given also that an animal, while sleeping, cannot be experiencing any perception at all in an unqualified way; it is plain that during the state called sleep the same affection must belong to all of the senses. For if it belongs to one sense but not to another, then an animal will perceive with the latter while sleeping. But that is impossible").

62 See, for instance, Antonio Zadra, Mathieu Pilon and Jacques Montplaisir, "Polysomnographic Diagnosis of Sleepwalking: Effects of Sleep Deprivation," *Annals of Neurology,* 63 (2008), pp. 513–19; Zadra and Pilon, "Parasomnias II"; Antonio Zadra, Alex Desautels, Dominique Petit and Jacques Montplaisir, "Somnambulism: Clinical Aspects and Pathophysiological Hypotheses," *The Lancet Neurology,* 12:3 (2013), pp. 287–88; Francesca Siclari and Giulio Tononi, "Sleep and Dreaming," in *The Neurology of Consciousness*, pp. 107–28 (pp. 123–24).

There is no reason to exclude the possibility that Aristotle had empirical evidence that contradicted his general conclusion that sleepwalkers forget their 'waking acts' but remember their dreams, but the question is how a, presumably, distorted memory of a sleepwalking episode can be distinguished with certainty from the memory of a dream. Although the discovery of REM-/NREM-sleep has given evidence against Aristotle's statement in *Somn.Vig.* that a *phantasma* and "some perception" is a necessary condition for sleepwalking,[63] there are also studies suggesting that in some cases there is indeed a connection between dream content and 'waking acts' performed in sleep.[64] The difference between a memory of authentic sense impressions in sleep on the one side and a memory of a dream that is reflected in the motor activity of the sleeper on the other will by necessity in many, if not all, cases be impossible to establish with certainty.[65]

63 *Somn.Vig.*, 2.456a24–29: κινοῦνται δ' ἔνιοι καθεύδοντες καὶ ποιοῦσι πολλὰ ἐγρηγορικά, οὐ μέντοι ἄνευ φαντάσματος καὶ αἰσθήσεώς τινος· τὸ γὰρ ἐνύπνιόν ἐστιν αἴσθημα τρόπον τινά· λεκτέον δὲ περὶ αὐτῶν ὕστερον.

64 See, e.g., Siclari and Tononi, "Sleep and Dreaming," pp. 123–24, and Delphine Oudiette, Smaranda Leu, Michel Pottier, Marie-Annick Buzare, Agnès Brion and Isabelle Arnulf, "Dreamlike Mentations during Sleepwalking and Sleep Terrors in Adults," *Sleep*, 32 (2009), pp. 1621–27.

65 See n. 17 above on Albert's observation that sleepwalkers who recall the sleepwalking episode interpret it as a dream.

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The Byzantine Reception of Aristotle's *De memoria*

1. Introduction

The succinct character of the treatise *De memoria et reminiscentia*, which hinders its interpretation up to this day, troubled in an analogous manner its Byzantine commentators.[1] A study of the relevant secondary literature on Aristotle's views on memory brings forward various unsolved problems of interpretation, connected both to the content[2] of the treatise and to the condition of its manuscript tradition.[3] In dealing with the particular difficulties of this Aristotelian treatise, Byzantine scholars had no access to previous commentaries belonging to the tradition of Late Antiquity.[4] In fact, it seems that the Greek medieval commentary tradition on Aristotle's *De memoria* relies heavily, if not exclusively, on the

1 For example, cf. David Bloch, *Aristotle on Memory and Recollection. Text, Translation, Interpretation and Reception in Western Scholasticism*, Philosophia Antiqua, 110 (Leiden: Brill, 2007), p. 9, on 451b14–15: "Michael's commentary (*In De mem.*, 25.23–29) shows that the Byzantines, like modern scholars, were uncertain as to the precise meaning of this sentence."

2 For problems that arise due to the loose use of memory terms, cf. Julia Annas, "Aristotle on Memory and the Self," in *Essays on Aristotle's De anima*, ed. by Martha C. Nussbaum and Amélie O. Rorty (Oxford: Oxford University Press, 1992/1995), pp. 297–311; Hendrik Lorenz, *The Brute Within: Appetitive Desire in Plato and Aristotle* (Oxford: Clarendon Press, 2006), pp. 162–63; Bloch, *Aristotle on Memory*, pp. 84–109. For instance, for the various interpretations of the exact nature of φαντάσματα, cf. Annas, pp. 297–311; Bloch, *Aristotle on Memory*, pp. 67–70. Also, for the restricted and unsatisfying Aristotelian account of memory, cf. Lorenz, pp. 168–70; Bloch, *Aristotle on Memory*, p. 75; Richard A. H. King, *Aristotle and Plotinus on Memory*, Quellen Und Studien Zur Philosophie, 94 (Berlin: De Gruyter, 2009), pp. 9–11.

3 For instance, there are many problems with the disputed passages 451a18–b10, 452a17–26, and 452a27, about which the manuscripts are in complete disagreement. Cf. Bloch, *Aristotle on Memory*, pp. 229–43, ch. 5, "Textual notes on the *De memoria*."

4 Cf. Börje Bydén, "Introduction: The Study and Reception of Aristotle's *Parva Naturalia*," in *The 'Parva Naturalia' in Greek, Arabic and Latin Aristotelianism. Supplementing the Science of the Soul*, ed. by Börje Bydén and Filip Radovic (Dordrecht: Springer, 2018), pp. 1–50.

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Memory and Recollection in the Aristotelian Tradition: Essays on the Reception of Aristotle's *De memoria et reminiscentia*, ed. by Véronique Decaix, Christine Thomsen Thörnqvist, Turnhout, 2021 (*Studia Artistarum*, 47), p.203-229
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extant work by the twelfth century Byzantine commentator Michael of Ephesus. Since Michael most probably did not have at his disposal any other ancient commentary to consult, he expressed some original ideas in his effort to provide coherence to the Aristotelian account. The remainder of the Byzantine commentary tradition on the *De memoria* consists in paraphrases of various kinds, whose derivative character often becomes evident. The Byzantine scholars of this 'Michaelian tradition' are Sophonias, George Pachymeres, Theodore Metochites, and George (Gennadios) Scholarios.

In this paper, my aim is to present Michael's commentary and to explore its influence on the later paraphrasts, in order to figure out interconnections among the Byzantines. All these Byzantine writings have generally been considered unworthy of attention, and thus little systematic work has been done on them.[5] However, a more thorough study of these texts is essential, since they constitute important links in the transmission of Aristotle's ideas about memory and recollection. First, I introduce Michael of Ephesus as a commentator and I attempt to detect the originality of his interpretations by drawing attention to those passages of his commentary that best convey his views. Subsequently, I focus on each one of his successors and examine the similarities between their paraphrases and the original commentary on which they depend. Overall, this paper seeks to contribute to the better understanding of the method Byzantine philosophers employed in reading the Aristotelian treatises and in dealing with the difficulties they faced while interpreting them.

2. Michael of Ephesus

2.1. Michael of Ephesus and His Works

Michael of Ephesus lived in Constantinople during the first half of the twelfth century CE. Information about him is very scarce and his numerous works are almost the sole source on his life and personality.[6] The very fact that he was a native of Ephesus is based on his own testimony in a comment on the *Ethica Nicomachea* (*In NE* 10, 570.21). He was a commentator on Aristotelian works who probably worked under the auspices of princess and historian Anna Comnena along with his fellow scholar Eustratius, Metropolitan bishop of Nicaea. It appears that Anna's personal interest in philosophy impelled her to form a philosophical circle in her monastic residence to the convent of Kekharitōmenēs, in Constantinople, after the death of her father, Alexios Comnenus (1118). The strongest evidence for the above suggestion comes

5 "This unreflecting usage of Aristotle became more and more pronounced in the eastern part of the empire, and it would only be a minor exaggeration to say that the sixth century CE saw the end of independent Aristotelian philosophy in the East (…). From about this time the commentaries were merely expository, and this general rule is certainly true in the case of the *De memoria* commentaries and paraphrases" (Bloch, *Aristotle on Memory*, p. 139).

6 For general information on Michael of Ephesus, cf. Katerina Ierodiakonou, "Michael of Ephesus," in *Encyclopedia of Medieval Philosophy: Philosophy between 500 and 1500*, ed. by Henrik Lagerlund (Dordrecht: Springer, 2011), pp. 784–86; Pantelis Golitsis, "Michel d'Éphèse," in *Dictionnaire des philosophes antiques*, vol. 7, ed. by Richard Goulet (Paris: CNRS, 2018), pp. 609–16.

from a short passage in a very long funeral oration written upon Anna's death by George Tornikes, Metropolitan of Ephesus.[7] In this passage, Anna is presented as having noticed an important gap in the transmission of Aristotle's texts due to the lack of commentaries on certain Aristotelian works.[8]

If the evidence of Anna's inspiring guidance to the scholars of her time and her encouragement to comment anew on long neglected Aristotelian treatises has any truth in it, Michael of Ephesus seems to have been very devoted indeed in accomplishing her wish. The list of his commentaries on Aristotle's works is long and its contents vary in quality and subject matter. He has been credited with the authorship of long commentaries on Aristotle's ethical treatises (*Ethica Nicomachea* 5, 9–10), on numerous physical and biological treatises (*De partibus animalium*, *De motu animalium*, *De incessu animalium, De generatione animalium, Parva naturalia*), on logical works (*Sophistici elenchi*), and others (*Metaphysica* 7–14).[9] The number of physical treatises on which he commented, along with the plethora of medical examples he uses, reveal that he was possibly a medical doctor, or at least very much interested in medicine.[10] With the addition of his commentaries on the spurious treatise *De coloribus* and on the *Politica*, both of which only partially survive, and of others that are now lost (on *Physica* and *Topica*), the breadth of his work grows significantly. It reveals his engagement in the task of composing systematic commentaries modelled on the ancient exegetical tradition and meant to fill a gap in the transmission of Aristotle's works.

For many of the Aristotelian treatises mentioned above, Michael's comments are the only surviving ones in Greek. Such is the case, for instance, with his comments on books nine and ten of the *Ethica Nicomachea*,[11] on the *Sophistici elenchi*, and on the *De*

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7 See Robert Browning, "An Unpublished Funeral Oration on Anna Comnena," in *Aristotle Transformed. The Ancient Commentators and Their Influence*, ed. by Richard Sorabji (London: Duckworth, 1990), pp. 393–406 (first published in *Proceedings of the Cambridge Philological Society,* 188 (1962), pp. 1–12). Mercken, however, is hesitant about how much evidence for the existence of a 'philosophical circle' around Anna we can infer from this oration (H. Paul F. Mercken, "The Greek Commentators on Aristotle's Ethics," in *Aristotle Transformed*, ed. by Richard Sorabji, pp. 407–43 (pp. 436–37)). For information about Anna's apartments in Kekharitōmenē, see Leonora Neville, *Anna Komnene: The Life and Work of a Medieval Historian* (Oxford: Oxford University Press, 2016), pp. 133–39.

8 "The works which philosophers of our time addressed to her bear witness to her love of learning, works concerning those writings of Aristotle on which commentaries had not been written until her time, but the explanation of which was transmitted orally in every kind of form, without certitude and with little zeal. (…) I have myself heard the wise man from Ephesus attribute the cause of his blindness to her, because he spent sleepless nights over commentaries on Aristotle at her command, whence came the damage done to his eyes by candles through desiccation" (f. 29v; trans. by Robert Browning). The text was first edited by Jean Darrouzès, *Georges et Démétrios Tornikes: Lettres et discours* (Paris: CNRS, 1970).

9 According to Concetta Luna, Michael is also the author of the commentary on *Metaphysica* 7–14 previously attributed to Alexander of Aphrodisias; see *Trois études sur la tradition des commentaires anciens à la Métaphysique d'Aristote* (Leiden: Brill, 2001), pp. 1–71.

10 Cf. Mercken, pp. 432–33. Also, Katerina Ierodiakonou, "Some Observations on Michael of Ephesus' Comments on *Nicomachean Ethics* X," in *Medieval Greek Commentaries on the Nicomachean Ethics*, ed. by Charles Barber and David Jenkins (Leiden: Brill, 2009), pp. 185–201, where she underlines Michael's frequent use of medical examples that seem to require a certain amount of in-depth medical knowledge (pp. 187–88).

11 For *NE* 5 there is already a preceding compilation of anonymous scholia, cf. Mercken, pp. 428–36.

incessu animalium. The Aristotelian short treatises of the *Parva naturalia*, along with the zoological treatises, are also amongst the works that the commentary tradition of Late Antiquity up to Michael's time seemed to consider of minor significance and not worthy of serious study. Such attention was mainly reserved for treatises such as the *Categoriae* and the *De anima*.[12]

Although we cannot be certain about the exact sources Michael used for the *De memoria* commentary, he definitely had few relevant scholia to rely on and absolutely no complete previous commentary. Michele Trizio[13] suggests that there is a connection between the Michaelian commentary and a corpus of some marginal notes found in a late twelfth-century manuscript including the Aristotelian *De memoria* (ms Vat. gr. 260), and argues that Michael must have borrowed some scholia for his own composition. Nevertheless, since these are less elaborate notes in a later manuscript it could plausibly be suggested that they are instead extracted from Michael's commentary, thus presenting abridged versions of his original comments rather than the other way round. Still, the evidence is scarce and the matter cannot be decicevely settled. An undeniable and important influence on Michael's work, though, is that of the late second-century commentator Alexander of Aphrodisias. It is obvious that Michael was well-acquainted with Alexander's commentaries, studied them carefully, and used them as his source and paradigm.[14] For his composition, he mostly employs material from Alexander's *De anima* and his commentary on Aristotle's *De sensu et sensibilibus*.[15] All these works by Alexander are immediately related to the *De memoria*, since the latter presupposes their content, which forms a theoretical substratum necessary for the explanation of the physiology and function of memory that Aristotle attempts there. Nevertheless, the direct use of Alexander's text is limited to the first few introductory pages of the forty dedicated to comments on memory and recollection; for the remaining part Michael does not draw any further from Alexander.[16] A further aid to his interpretation are other Aristotelian treatises, to which he turns when he deems it relevant and helpful for understanding the text. He recites ideas from the *Topica* and the *Rhetorica* (*In De mem*. 29.6–11), the

12 Michele Trizio, "The Byzantine Reception of Aristotle's *Parva Naturalia* (and the Zoological Works) in Eleventh and Twelfth Century Byzantium: An Overview," in *The 'Parva Naturalia' in Greek, Arabic and Latin Aristotelianism*, ed. by Bydén and Radovic, pp. 155–68 (pp. 156–57).

13 Trizio, "The Byzantine Reception," pp. 160–61.

14 Cf. Pier Luigi Donini, "Il *De anima* di Alessandro di Afrodisia e Michele Efesio," *Rivista di filologia e di istruzione classica*, 3rd ser., 96 (1968), pp. 316–23.

15 Cf. Michael of Ephesus, *In Parva naturalia commentaria*, ed. by Paul Wendland, Commentaria in Aristotelem Graeca, 22.1 (Berlin: Reimer, 1903), p. xii. For the first page of his commentary, Michael uses passages from Alexander of Aphrodisias, *In librum De sensu commentarium*, ed. by Paul Wendland, Commentaria in Aristotelem Graeca, 3.1 (Berlin: Reimer, 1901), p. 1. For pages 2–5, he uses passages from Alexander's *De anima libri mantissa*, ed. by Ivo Bruns, Commentaria in Aristotelem Graeca, suppl. 2.1 (Berlin: Reimer, 1887), pp. 66–72.

16 With the exception of a few minor comments scattered in the rest of the *Parva naturalia* commentary: Michael, *In De mem*., 33.3–4 — Alexander, *Mantissa*, 27.27; Michael, *In De somno*, 52 — Alexander, *De anima*, 74.19–23, 95.1–4; Michael, *In De juventute e senectute*, 100 — Alexander, *De anima*, 94.26–30, 95.6–11/19–22.

Analytica Posteriora 1.1 (*In De mem.* 24.7–8), from the treatise *De somno* (*In De mem.* 39.21–26), and from the *Problemata* (*In De mem.* 20.14–28).

Michael's commentary is extant in its entirety. It is about four times longer than the original *De memoria*, and thoroughly exegetical. As a textual witness for the Aristotelian treatise, Michael is not considered very significant, although he sometimes deviates from the manuscript tradition. David Bloch, in his most recent edition of the *De memoria*, includes Michael's readings in the critical apparatus and divides them into lemmata, citations, paraphrases, and *variae lectiones* (when Michael mentions an alternative reading).[17] The various lemmas are accompanied by detailed paraphrases and Michael tries to effectively interpret and explain the meaning encapsulated in the citations of Aristotle's text. His method is often quite unorthodox, at least from a modern point of view. He does not hesitate to emend the given text in various ways: he offers alternative readings and possible interpretations for the ambiguous passages,[18] he interpolates words or whole phrases,[19] he changes the word order and the punctuation,[20] and he generally clarifies everything elliptical or obscure based on his own views and his personal understanding.[21] As he explicitly says later on in his *In De respiratione* commentary, he does so on purpose.[22] According to him, the proper interpreter (ἐξηγητής) ought to deliberately intervene and alter the text, even by changing the word order, in order to bring out the correct meaning (τὴν λέξιν καθιστάνειν); his fellow commentators, Michael claims, who do not employ this method (a method somewhat controversial for modern interpreters), are completely without voice (ἄφωνοι) and do not understand at all what they read in the books. Likewise, he reads, interprets, and uses the vocabulary of memory and that of recollection interchangeably, and often provides synonyms or equivalent phrases to clarify his preferred meaning.[23] Moreover, his explanations are enhanced by the use of illustrative examples that, according to him, help the clear demonstration of the discussed ideas (ἵνα σαφέστερον εἴπω: *In De mem.* 9.15–20).[24] Among them, some characteristic cases are the story of the donkey that falls in a hole (*In De mem.*

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17 Bloch, *Aristotle on Memory*, p. 21.

18 E.g., *In De mem.*, 27.20–28.12; 34.15: φέρεται δὲ καὶ ἄλλη γραφὴ ἔχουσα οὕτως.

19 E.g., *In De mem.*, 15.2: τοῦτο γὰρ δεῖ προσυπακούειν; 31.9: δεῖ γὰρ τούτου προσυπακούειν.

20 E.g., *In De mem.*, 22–23.

21 E.g., *In De mem.*, 9.34–35: πάνυ δὲ ἀσαφῶς καὶ μεμελανωμένως ἀπαγγέλλει τὰ λεγόμενα; *In mem.*, 16.16–17: ἐλλιπῶς δὲ ῥηθὲν καὶ συντόμως εἴη ἂν τὸ λεγόμενον δυνάμει τοιοῦτον; 31.12–13: δεῖ δὲ ἡμᾶς μᾶλλον προσδιορίσαι περὶ τούτων διὰ τὸ παραλελοιπέναι τοῦτον ταῦτα διὰ συντομίαν; 35.5–9: ἀσάφειαν δὲ πολλὴν ἐνεποίησε διὰ τὸ συγκεχυμένως τὴν τῶν στοιχείων ἔκθεσιν ποιήσασθαι (…) δεῖ δὲ ἡμᾶς πάλιν τὴν λέξιν ἐκθέντας πειρᾶσθαι, ὡς δυνατόν, σαφηνίζειν.

22 Michael, *In De respiratione*, 142.11–25. Cf. also his comment on the *Sophistici elenchi*, 183.21–22: καὶ σύνηθες αὐτῷ τοιαύταις χρᾶσθαι ἑρμηνείαις ("It is usual for him [i.e., Aristotle] to use such reverse expressions").

23 E.g., *In De mem.*, 20.11–13: ὁ γὰρ ἀναμνησθεὶς τρόπον τινὰ ἐμνήσθη; 22.26: τὸ δὲ μνημονεύειν ἀντὶ τοῦ ἀναμιμνῄσκεσθαι εἴληπται; 14.8–9: ζωγραφήματος τὴν ἕξιν καὶ μονὴν μνήμην εἶναι λέγομεν; 35.15–16: διὰ τοῦ κινεῖσθαι ἐδήλωσε καὶ τὸ νοεῖν καὶ τὸ μεμνῆσθαι καὶ τὸ ἀναμιμνῄσκεσθαι, *In De mem.*, 37.32: μνήμη ἢ ἀνάμνησις.

24 "It would not be like Michael to miss a chance to expand his commentary with another example" (Sten Ebbesen, *Commentators and Commentaries on Aristotle's Sophistici elenchi*, Corpus Latinum Commentatorium in Aristotelem Graecorum, 7 (Leiden: Brill, 1981), vol. 2, p. 276).

8.11–13), the example of the picture of an elephant in Athens that reminds us of the actual elephant in India (*In De mem.* 9.15–17), the use of Euripides' *Hecuba* (vv. 1–2) (*In De mem.* 21.6–7), the example of a picture of a lyre which reminds one of a song (*In De mem.* 26.7–12), and many more.

All the above additions, alterations and interventions in the text aim at bringing forward an explanation of memory and recollection that avoids contradiction, deals with difficult Aristotelian passages, and adjusts the text in a consistent manner from the beginning to the end, in order to provide coherence to the Aristotelian account and to reconcile it with other Aristotelian works.[25] As it will become evident from what follows, in his effort to explain Aristotle's treatise Michael does not make arbitrary changes. Rather, his work is methodically guided by his own key ideas and intuitions about memory and recollection.

2.2. Michael of Ephesus' Views on Memory

There are two distinct features of memory which arise from the systematic study of Michael's comments on the *De memoria*: First, memory, at least in the case of humans, inevitably employs the thinking part of the soul, along with sense perception. Second, recalling and using a stored mnemonic imprint is an essential feature of memory, which he takes to be an active process rather than merely the storage of past images in the soul.

More specifically, Michael's first insight comes from his emphasis on certain Aristotelian remarks about the memory of intelligible objects, that is, of those objects that are not grasped without imagination (*Mem.* 450a1–25). In commenting on this passage, he suggests that reason is required for memory:

> If this were the case, memory would not be a state or affection also of the reasoning part of the soul, but only of the sensing part. For reason is intertwined with imagination, as we shall learn by straining the wording, and cannot think of anything without it. For imagination is like a writing-tablet to reason. This is because reason, by seeing all the things written and imprinted on imagination through the actualised sense, strips off their general accounts.[26]

Νοῦς and φαντασία are so closely connected in his interpretation that Michael even considers it possible that Aristotle uses the noun ὑπόληψις ("conception", "belief") to refer to imagination, by a misuse of language (ἢ ὑπόληψιν λέγοι ἂν νῦν καταχρηστικώτερον τὴν φαντασίαν), even though he takes this noun as referring to "that which commonly belongs to opinion, thinking, and to every other intellectual

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25 The views expressed by Aristotle in some of his other treatises seem to contradict his *De memoria* account. For instance, this is the case with a passage in the *Topica* (4, 125b17–19) and with *Metaphysica* 9, 1068a30–33, where forgetting (λήθη) is opposed to recollection instead of memory.

26 Michael, *In De mem.*, 9.1–7: εἰ δὲ τοῦτο, οὐκ ἂν εἴη ἡ μνήμη ἕξις ἢ πάθος καὶ τοῦ λογικοῦ μέρους τῆς ψυχῆς, ἀλλὰ μόνου τοῦ αἰσθητικοῦ. ὁ γὰρ νοῦς συμπλέκεται τῇ φαντασίᾳ, ὡς μαθησόμεθα τὴν λέξιν βασανίζοντες, καὶ ἄνευ ταύτης οὐδὲν νοεῖ· πίναξ γάρ ἐστιν ἡ φαντασία τῷ νῷ. τὰ γὰρ ἐν αὐτῇ ἐγγραφέντα καὶ ἐντυπωθέντα ἀπὸ τῆς κατ' ἐνέργειαν αἰσθήσεως ὁρῶν ὁ νοῦς ἀποσυλᾷ τοὺς καθόλου λόγους αὐτῶν.

power" (κατά τε δόξης καὶ νοήσεως καὶ τῶν λοιπῶν λογικῶν δυνάμεων: *In De mem.* 7.33–8. 2). Such is the less technical use of this noun in the context of the *De anima* and the *De sensu*, where it denotes in general every kind of belief, regardless of whether it is true or false, and has as its variants knowledge, opinion, practical wisdom etc.[27] By suggesting φαντασία as a synonym for ὑπόληψις, Michael aims to associate φαντασία with thinking. An intertwining, or very strong connection, of reason and imagination affects to a great extent memory as well. Alluding to that connection enables Michael to explain throughout his commentary how memory works when activated:

> When the person looks at it [i.e., at the picture of an animal], and acts upon it solely by expressing admiration or reproach, without at all thinking that it is an artistic representation of a particular animal of this kind, then it is called a picture. But if, on the other hand, together with looking he reckons in addition that it is also an artistic representation of a lion or a wolf or of some other animal, this is called a representation. And it is one and the same thing, a representation and a picture, but in a different way in each case. As it was with these, the trace and the picture in the heart — which he called image — should be likewise understood as being something in itself, some nature and one thing, and also an image of something else, exactly like that which was painted on the wall.[28]

In this passage, Michael describes the way we process memories using verbs that refer to critical thinking and understanding; verbs such as προσεννοῶ ("think of"/"understand in addition"), προσλογίζομαι ("reckon in addition"), and ὑπολαμβάνω ("interpret"/"understand in a certain way") imply that reason is involved and a kind of rational understanding is required along with sense perception. Interestingly enough, the verbs used by Aristotle in the relevant passage (450b18) are θεωρέω ("look at"/"perceive"/"contemplate"), αἰσθάνομαι ("perceive"/"apprehend by the senses"), and also earlier on (450a21) προσαισθάνομαι ("to sense in addition"/"perceive besides"). Aristotle wishes to disassociate memory from thinking and emphasises its link to sense perception, which mainly supplies it with its content. On the other hand, for Michael memory is based on the senses but also engages some kind of reasoning, through which one can deliberate and figure out more about the picture one immediately perceives. One judges its content (by expressing admiration or reproach) and thinks about it in order to figure out whether he recognises it as something that he knows, for instance, that it is an image of a particular animal which he can further identify as a lion, or a dog. It becomes clear that Michael considers

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27 Cf. Aristotle's use of ὑπόληψις in *De anima*, 427b25–28: εἰσὶ δὲ καὶ αὐτῆς τῆς ὑπολήψεως διαφοραί, ἐπιστήμη καὶ δόξα καὶ φρόνησις καὶ τἀναντία τούτων, περὶ ὧν τῆς διαφορᾶς ἕτερος ἔστω λόγος.

28 Michael, *In De mem.*, 15.12–20: ὅταν μὲν γὰρ ὁρᾷ τοῦτο ὁ ὁρῶν καὶ ἐνεργῇ περὶ αὐτὸ μόνον τὴν τέχνην θαυμάζων ἢ κακίζων, μηδὲν ὅλως προσεννοῶν, ὅτι μίμημά ἐστι τοιουδὶ ζῴου, τότε λέγεται ζῷον· ὅταν δὲ πρὸς τῷ ὁρᾶν προσλογίζηται καὶ ὅτι μίμημά ἐστι λέοντος ἢ λύκου ἢ ἄλλου τινὸς ζῴου, λέγεται τότε εἰκών. καὶ ἔστι τὸ αὐτὸ καὶ ἓν καὶ εἰκὼν καὶ ζῷον, ἄλλως μέντοι καὶ ἄλλως. ὡς οὖν ἐπὶ τούτων, οὕτω καὶ τὸ ἐν τῇ καρδίᾳ ἐγκατάλειμμα καὶ ζωγράφημα, ὅπερ αὐτὸς φάντασμα εἶπε, δεῖ ὑπολαβεῖν, ὡς ἔστι καὶ αὐτό τι καθ' αὑτὸ καὶ φύσις τις καὶ πρᾶγμα καὶ ἄλλου φάντασμα, ὥσπερ καὶ τὸ ἐν τῷ τοίχῳ γεγραμμένον.

memory as involving rational calculation and deliberation. In other words, the movements in the soul that take place when one thinks are exactly the same when one remembers, and Michael claims that thinking and remembering are of one kind when the soul is engaged in remembering.[29]

Further, according to Michael, memory is more than simply retaining memories in the soul.[30] He underlines this by giving the following definition of memory, according to which memory includes retaining *and recalling* the mnemonic imprints:

> If then the entire imprint remains strong and clear, so that we can recite it unhindered and say it out loud as a whole, that is memory.[31]

Apart from the necessary creation and preservation of a mnemonic imprint in the soul, the above passage introduces an additional condition for memory; the person who remembers engages in some kind of activity that involves the use of various memories. One is supposed to be able to repeat a memory after bringing it to mind and to express loudly the whole thing. Michael repeats this point and clarifies it on many later occasions (for instance, 21.11–13, 22.12–15). While doing this, he adjusts accordingly the Aristotelian definition of *Mem.* 451a23–24:[32]

> For this is what he stated again by the phrase "when the state or affection has been produced within a person, then there is memory". The phrase is indeed very elliptical. It would have been more appropriate if it was something like this: "So, when the state or affection is produced in such a way, in which it is possible for us to express it, without at all expecting from one part to gather together the rest, that is memory and not recollection."[33]

Michael treats the Aristotelian phrase as rather succinct and thus needing to be further explained if it is to define memory properly and fully. Again, what is supplied is the demand that the agent be able to recall and express loudly a particular memory, not only to passively keep the mnemonic imprint in her soul. Without hesitation, Michael characterises Aristotle's wording as "very elliptical" (λίαν ἐλλιπής) and suggests a reconstruction of the text that better supports his own views on memory.

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29 Michael, *In De mem.*, 35.15–16: αὐτὸς δὲ διὰ τοῦ κινεῖσθαι ἐδήλωσε καὶ τὸ νοεῖν καὶ τὸ μεμνῆσθαι καὶ τὸ ἀναμιμνήσκεσθαι.

30 This is considered the standard account of Aristotelian memory; for example, cf. Sophie-Grace Chappell, "Aristotle," in *The Routledge Handbook of Philosophy of Memory*, ed. by Sven Bernecker and Kourken Michaelian (New York: Routledge, 2017), pp. 397–407.

31 Michael, *In De mem.*, 19.22–24: οὕτος δὴ ὅλος ὁ τύπος εἰ μὲν μένει ἰσχυρός τε καὶ καθαρός, ὥστε ἀνεμποδίστως ὅλον ἡμᾶς αὐτὸν δύνασθαι ἀπαγγέλλειν καὶ ὅλον προβάλλεσθαι, τοῦτο μνήμη.

32 Cf. Aristotle's definition at 449b24–25: ἔστι μὲν οὖν ἡ μνήμη οὔτε αἴσθησις οὔτε ὑπόληψις, ἀλλὰ τούτων τινὸς ἕξις ἢ πάθος, ὅταν γένηται χρόνος ("Therefore memory is not perception or conception, but a state or affection connected with one of these, when time has elapsed" (trans. by Richard Sorabji)).

33 Michael, *In De mem.*, 21.14–18: τοῦτο γὰρ πάλιν ἐδήλωσε διὰ τοῦ <ὅταν γένηται ἡ ἕξις ἢ τὸ πάθος, τότε μνήμη ἐστίν.> ἔστι δὲ λίαν ἐλλιπὴς ἡ λέξις. ἦν γὰρ ἂν κατάλληλος, εἰ οὕτω πως εἶχεν· ὅταν γὰρ γένηται ἡ ἕξις ἢ τὸ πάθος οὕτως, ὥστε ἀποδιδόναι δύνασθαι ἡμᾶς αὐτό, μηδ' ὅλως περιμένοντας ἐκ τοῦ μέρους ἀθροῖσαι καὶ τὸ λοιπόν, μνήμη τοῦτο καὶ οὐκ ἀνάμνησις.

2.3. Michael of Ephesus' Views on Recollection

The second part of Michel's commentary (*In De mem.* 18.29–41.6) covers the Aristotelian chapter on recollection, in which Michael clearly states that he conceives of that process as a kind of memory (μνήμη τις). Consequently, Michael's understanding of memory itself is also affected, and he applies details from this part of Aristotle's account to his explanation of both concepts. Still, recollection is a very particular mnemonic application and, as such, it is distinguished by certain characteristics. More specifically, recollection comes about only in cases that involve forgetting (λήθη), in the sense of partial memory loss. Furthermore, according to Michael's interpretation, recollection is always a deliberate, voluntary process.

In the following text, Michael comments on the Aristotelian passage *Mem.* 451b2–13 and introduces recollection:[34]

> Recollection then is renewal of a previous memory, which, when forgetting has occurred, will release the rest. Thus, recollection is a kind of memory. What is being said will become clear in the following: When the entire impression and the memory-image, which is present in the primary faculty of sense due to the actualised sense, remains and is kept distinct and bright and clear so that the soul is able to move it as a whole and can see the whole thing and bring it forward as a representation of something, this is memory. But when some part of the entire memory-image stays distinct and clear, while the rest is completely faint and superficial, and as a result the soul can neither move it nor can be moved by it, and after some movements are caused in the soul from the distinct and clear part, through the clear it sets free and in a way finds the rest (that which was faint and completely darkened), this is recollection — something like a re-sketch of a previous memory. Not of the entire memory though (since this would be learning), but of a part.[35]

It becomes clear, here, that Michael deals with memory and recollection in a very similar way. In fact, it happens that the operations which take place in the soul in each case are the same. The memory-images in it are moved, and one movement follows another and is caused by it. Recollection, then, is somehow like memory,

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34 ἀλλ' ὅταν ἀναλαμβάνῃ ἣν πρότερον εἶχεν ἐπιστήμην ἢ αἴσθησιν ἢ οὗ ποτε τὴν ἕξιν ἐλέγομεν μνήμην, τοῦτ' ἐστὶ καὶ τότε τὸ ἀναμιμνήσκεσθαι τῶν εἰρημένων τι ("But when one recovers some previous knowledge, or perception or some other experience, the state of which we called memory, then this is to recollect one of the named things" (trans. by David Bloch, adjusted)).

35 Michael, *In De mem.*, 18.32–19.13: ἔστι δὲ ἀνάμνησις ἀνανέωσις προτέρας μνήμης, ἐπὰν λήθη γενομένη τὸ συνεχὲς ἀναλύσῃ. ὥστε ἡ ἀνάμνησίς ἐστι μνήμη τις. ἔσται δὲ σαφὲς τὸ λεγόμενον ὧδε·ὅταν ὁ τύπος ὅλος καὶ τὸ ἀναζωγράφημα τὸ ἐν τῷ πρώτῳ αἰσθητηρίῳ ἀπὸ τῆς κατ' ἐνέργειαν αἰσθήσεως ἐνυπάρχον ὑπομένῃ καὶ σῴζηται τρανές τε καὶ φαιδρὸν καὶ καθαρὸν οὕτως, ὥστε ὅλον αὐτὸ δύνασθαι τὴν ψυχὴν κινεῖν καὶ ὅλον ὑπ' αὐτῆς ὁρᾶσθαι καὶ προβάλλεσθαι ὡς εἰκών τινος, τοῦτο μνήμη ἐστίν. ὅταν δὲ μέρος μέν τι τοῦ ὅλου ἀναζωγραφήματος μένῃ τρανὸν καὶ καθαρόν, τὸ δὲ λοιπὸν πάμπαν ἀμυδρὸν καὶ ἐπιπόλαιον, ὥστε μήτ' αὐτὸ δύνασθαι τὴν ψυχὴν κινεῖν μήτ' ἐκείνην ὑπ' αὐτοῦ κινεῖσθαι, καὶ ἐκ τοῦ μέρους τοῦ τρανοῦ καὶ καθαροῦ τινας κινηθεῖσα κινήσεις τὸ συνεχὲς τῷ καθαρῷ (τοῦτο δὲ ἦν τὸ ἀμυδρὸν καὶ πάμπαν ἐζοφωμένον) ἀναλύσῃ καὶ οἷον εὑρήσῃ, τοῦτο ἀνάμνησις, οἱονεὶ ἀναζωγράφησις τῆς προτέρας μνήμης, οὐ πάσης (τοῦτο γὰρ μάθησις), ἀλλά του μέρους.

but memory employed when some part of a memory-image is blurry and faint, in order to emend it by the use of the remaining good part. Under such circumstances, a memory is partially forgotten and the related mnemonic process malfunctions. This is when recollection recovers the missing part and restores the memory. The way it proceeds so that it completes this task is still the same (that is, movements caused in the soul), but this time the process is initiated by the remaining clear and distinct part, which aims at moving and awakening the faint one. Accordingly, Michael's characterisation of recollection as a kind of memory ought to be understood as a particular application of memory when certain conditions are met, rather than an additional kind of memory, completely distinct. In other words, recollection is memory employed for a specific purpose, and as soon as that purpose is achieved memory is restored and performs its proper tasks.

The other significant characteristic of recollection, which follows from Michael's account as described above, is that it is deliberate. Since it has a particular role to play in the general mnemonic process, one inevitably employs it on purpose, whenever one judges that the circumstances demand it. Recollection will assist someone in remembering what is needed but currently forgotten. The intention to remember the missing part of a memory is, therefore, presupposed. The necessary condition is for the agent to be seeking something, otherwise the process is not considered recollection but plain memory. When not seeking, people do not recollect. This is why Michael provides the following explanation in the last part of his comment on lemma 451b16:

> In this way, then, do men recollect when they seek from the similar or the contrary or the closely connected; but even "when they don't seek" like this (meaning neither from similar things nor from contrary nor from closely connected) they frequently recollect, when by causing some other movement this particular movement occurs. As it often happens for example with those who remember Socrates by recalling a song; because this song is neither similar to Socrates nor contrary nor closely connected to him. Thus, he says that recollection can also occur like this. "In most cases" though, "when other movements of the sort that we have mentioned have occurred" (meaning similar or contrary or closely related), then recollection occurs.[36]

This part of the comment concerns the Aristotelian passage *Mem.* 451b22–24:

> In this way, then, men seek, and, even when not seeking, they recollect in this way, when the movement happens after another.[37]

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36 Michael, *In De mem.*, 27.9–17: οὕτω μὲν οὖν ζητοῦντες ἐκ τῶν ὁμοίων ἢ ἐναντίων ἢ τῶν σύνεγγυς ἀναμιμνησκόμεθα, ἀλλὰ καὶ οὕτω <μὴ ζητοῦντες,> τουτέστι μὴ ἐκ τῶν ὁμοίων μηδὲ ἐκ τῶν ἐναντίων μηδὲ τῶν σύνεγγυς, πολλάκις ἀναμιμνήσκονται, ὅταν ἄλλην τινὰ κίνησιν κινηθέντες ἐκείνη γένηται. οἷον πολλάκις ἀναμνησθέντες ᾠδὴν ἀνεμνήσθησαν Σωκράτους· ἥτις ᾠδὴ οὔτε ὁμοία ἐστὶ Σωκράτει οὔτ' ἐναντία οὔτε σύνεγγυς. γίνεται μὲν οὖν καὶ οὕτω, φησίν, ἀνάμνησις· ἀλλὰ <τὰ πολλὰ ἐτέρων γενομένων κινήσεων, ὁποίων εἴπομεν,> τουτέστιν ὁμοίων ἢ ἐναντίων ἢ σύνεγγυς, γίνεται ἡ ἀνάμνησις.

37 Trans. by David Bloch; ζητοῦσι μὲν οὖν οὕτω, καὶ μὴ ζητοῦντες δ' οὕτως ἀναμιμνήσκονται, ὅταν μεθ' ἑτέραν κίνησιν ἐκείνη γένηται.

In these lines Aristotle mentions two circumstances in which recollection can occur:[38] a) in seeking (ζητοῦσι) and b) without seeking (μὴ ζητοῦντες). These two are valid cases of recollection and they both come about in the same way, which was described earlier on in the treatise (451b19–20). What the Philosopher says here is that in both circumstances people recollect in the indicated way, no matter whether they seek or not. For this interpretation, οὕτως is taken as referring to ἀναμιμνήσκονται ("they recollect in this way"). This is the most common reading[39] and also better supported by the general context of the chapter on recollection.[40] Hence, in the Aristotelian account there is room for accidental or involuntary recollection that is not strictly deliberate. An instance of such recollection would occur when one recalls one's hometown by seeing in a tavern's menu a traditional dish that originated from that town.

On the contrary, Michael takes for granted in his interpretation that recollection is part of a seeking process and adjusts his reading accordingly to make the text fit this view.[41] He takes οὕτως as referring to the immediately previous μὴ ζητοῦντες,[42] meaning that even when people do not recollect in the suggested way, it is possible that they sometimes recollect. He further explains his reading by giving an example in which someone who is indeed attempting to recall Socrates manages to do so, but through bringing into mind a song that is completely irrelevant to him. That is to say, recollecting by something similar, contrary, or closely related is a preferable way to recollect, but not indispensable for the occurrence of recollection.

Therefore, Michael's method of commenting on the *De memoria* seems to be more careful and thorough in comparison to his work on other treatises, such as the commentary on the *Sophistici elenchi*. For the latter, Sten Ebbesen claims that he did no more than compile passages from older books without further process or elaboration.[43] However, it seems that he was more fastidious and original when composing the *De memoria* commentary; as for the rest of the treatises of the *Parva naturalia* he comments on, this remains to be assessed by further research.

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38 For a third, see Richard Sorabji, *Aristotle on Memory*, 2nd ed. with a new foreword (London: Duckworth, 2004), pp. 100–101.

39 Hendrik Lorenz argues that this is the reading strongly suggested by the word order, otherwise the Greek is strained; see Lorenz, pp. 164–65, esp. n. 43.

40 Cf., e.g., *Mem.*, 451b10–14. Cf. also *Insomn.*, 460b3–16; *NE*, 1166b15.

41 For this aspect of Michael's understanding of recollection, see also *In mem.*, 23.10–13: "So, when someone after seeking from the remaining part of his knowledge, finds and recovers the rest as well, this is to recollect something of those mentioned and in that case. This is how we should read the phrase 'this and in that case is to recollect one of the named objects'" (ὅταν οὖν ἐκ τοῦ ἐνόντος μέρους τῆς ἐπιστήμης ζητήσας εὑρήσῃ καὶ ἀναλάβῃ καὶ τὸ λοιπόν, τοῦτό ἐστι τὸ ἀναμιμνήσκεσθαι τῶν εἰρημένων τι καὶ τότε. οὕτω γὰρ δεῖ τὴν λέξιν ἀναγινώσκειν τὴν <τοῦτό ἐστι καὶ τότε ἀναμιμνήσκεσθαι τῶν εἰρημένων τι.>).

42 Richard Sorabji also adopts this reading for his own reasons, although he admits it is not the most natural. See Sorabji, *Aristotle on Memory*, p. 99.

43 Sten Ebbesen, "Philoponus, 'Alexander' and the Origins of Medieval Logic," in *Aristotle Transformed. The Ancient Commentators and Their Influence*, ed. by Richard Sorabji (London: Duckworth, 1990), pp. 445–61 (p. 448). About Michael's method, style, and language, see also Karl Praechter, review of Michael Hayduck (ed.), *Michael Ephesii in libros De partibus animalium commentaria* (1904), *Göttingische gelehrte Anzeigen,* 168 (1906), pp. 861–907; Ebbesen, *Commentators and Commentaries*, pp. 268–85.

3. Sophonias

Sophonias was a Byzantine author of paraphrases of Aristotle's works who lived in Constantinople in the second half of the thirteenth century CE.[44] Except for his paraphrase of the *Parva naturalia*, he composed paraphrases of the *De anima* (which is the most extensive and probably his first work), the *Categoriae*, the *Analytica priora* 1, and the *Sophistici elenchi*. He wrote paraphrases because he believed that Aristotle's texts are "oracular" and obscure and therefore in need of clarifications and helpful examples, as he notes in the description of his own method in the preface of his *De anima* commentary:[45]

> For, who does not know that the Aristotelian phrases are in many places like oracular responses and they are in need of the power of divination?

In the same preface, in a rare occasion where Sophonias speaks in his own voice, he presents the two different pre-existing kinds of commenting, extant commentary and paraphrase, and he expresses his intention to proceed by composing a third kind of exegetical work, something more like a combination of paraphrase and commentary.[46] Even if he intended to apply these methodological guidelines to the *De memoria* paraphrase, what he actually does is draw directly from Aristotle and Michael without citing and combine them to create an abridged version of the original text.

In one group of manuscripts, his work on the *Parva naturalia* is wrongly attributed to the earlier commentator and historian Themistius (fourth century CE). The problem of authorship was resolved with the help of evidence from the passages in the paraphrase where Michael's commentary is quoted and, thus, his authorship of the earliest paraphrase of the *De memoria* is no longer disputed.[47] Despite some scarce glosses here and there, his paraphrase is generally unilluminating as regards the understanding of the original Aristotelian treatise. Sophonias proceeds in roughly the same way that Sten Ebbesen describes as "standard" for the case of his *Elenchi* paraphrase: addition of glosses, substitution of synonyms for single words or imprecise phrases, and addition of examples.[48] Nevertheless, this is the first Byzantine paraphrase

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44 See Denis Searby, "Sophonias," in *Encyclopedia of Medieval Philosophy*, ed. by Henrik Lagerlund (Dordrecht: Springer, 2011), pp. 1208–10; Denis Searby, "Sophonias," in *Dictionnaire des philosophes antiques*, ed. by Richard Goulet (Paris: CNRS, 2018), vol. 6, pp. 473–77.

45 Sophonias, *In libros Aristotelis De anima paraphrasis*, ed. by Michael Hayduck, Commentaria in Aristotelem Graeca, 23.1 (Berlin: Reimer, 1883), 2.12–13.

46 For an account of Sophonias' paraphrases of the *De anima*, see Henry J. Blumenthal, "Sophonias' Commentary on Aristotle's *De anima*," in *Néoplatonisme et philosophie médiévale: Actes du Colloque international de Corfou, 6–8 octobre 1995*, ed. by Linos G. Benakis (Turnhout: Brepols, 1997), pp. 307–17; Börje Bydén, "Λογοτεχνικές καινοτομίες στα πρώιμα παλαιολόγεια υπομνήματα στο *Περὶ ψυχῆς* του Αριστοτέλη (Literary Innovation in the Early Palaeologan Commentaries on Aristotle's *De anima*)," *Υπόμνημα στη Φιλοσοφία*, 4 (2006), pp. 221–51.

47 For Sophonias' use of an inferior manuscript of Michael's commentary, see Sophonias (Pseudo-Themistius), *In Aristotelis Parva naturalia paraphrasis*, ed. by Paul Wendland, Commentaria in Aristotelem Graeca, 5.6 (Berlin: Reimer, 1903), pp. v–xi.

48 Cf. Ebbesen, *Commentators and Commentaries*, p. 335.

on the *De memoria* and holds a significant position in the reception of Michael's interpretation and the diffusion of his views. Sophonias bases his work (with the exception of the first couple of pages) for the most part on Michael's commentary, rather than on the original Aristotelian text, and thus Michael's ideas are intertwined with Aristotle's words throughout the paraphrase. He cites explicitly most Michaelian interpretations and repeats the aforementioned features of Michael's 'theory' about memory and the restricted role of recollection. In addition, he adopts Michael's alternative terminology to refer to memory, recollection, and their explanation, along with most of the illustrative examples suggested by Michael.

The close examination of interpretative choices for various ambiguous Aristotelian passages confirms Michael's influence on Sophonias' paraphrase. The lines below from the first page of the paraphrase are indicative of how he adopts Michael's explanations and reproduces them in order to complement his text. What is more, in his explanation of memory Sophonias evidently employs vocabulary suggested by Michael, even though it does not match the Aristotelian views in the relevant part of the treatise.

> But when a person has the knowledge or the perception without the [external] objects (ἄνευ τῶν ἔργων) (and by "objects" I mean things like this particular animal, or this particular white colour, or the triangle in this particular book), and he also considers time, then in a word we'll say that he remembers.[49]

With these words, Sophonias paraphrases Aristotle's *Mem*. 449b18–19, a disputed passage for which some manuscripts attest the Greek word ἔργων and others the word ἐνεργειῶν. Here Aristotle stresses the fact that for the occurrence of memory a certain time interval is necessary after the initial impression in the soul of an object of knowledge or sense perception. According to David Bloch, the original reading is most probably the *lectio difficilior* ἔργων and the alternative ἐνεργειῶν was supplied as a gloss by a later commentator, in order to convey the meaning of the exercising of the relevant faculties.[50] The latter is the sense according to which modern scholars translate the text,[51] but the word could as well refer to the immediate external

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49 Sophonias, *In De mem*., 1.20–23: ὅταν δ' ἄνευ τῶν ἔργων ἔχῃ τὴν ἐπιστήμην καὶ τὴν αἴσθησιν (ἔργα δὲ λέγω οἷον τοδὶ τὸ ζῷον ἢ τοδὶ τὸ λευκὸν καὶ τὸ ἐν τῷδε τῷ βιβλίῳ τρίγωνον), προσεννοῇ δὲ καὶ χρόνον, τότ' ἂν ἁπλῶς μεμνῆσθαι λέγοιτο.

50 See Bloch, *Aristotle on Memory*, p. 229. The reading of b in Bloch's edition is ἔργων, and α, U read ἐνεργειῶν. Such an interpretation of the word ἔργα brings the text in accord with the relevant passage of the *Eudemian Ethics*, 1219a13–17: ἀλλὰ τὸ ἔργον λέγεται διχῶς. τῶν μὲν γάρ ἐστιν ἕτερόν τι τὸ ἔργον παρὰ τὴν χρῆσιν, οἷον οἰκοδομικῆς οἰκία ἀλλ' οὐκ οἰκοδόμησις καὶ ἰατρικῆς ὑγίεια ἀλλ' οὐχ ὑγίανσις οὐδ' ἰάτρευσις, τῶν δ' ἡ χρῆσις ἔργον, οἷον ὄψεως ὅρασις καὶ μαθηματικῆς ἐπιστήμης θεωρία ("But 'work' has two senses; for some things have a work beyond mere employment, as building has a house and not the act of building, medicine health and not the act of curing and restoring to health; while the work of other things is just their employment, e.g., of vision seeing and of mathematical science contemplation"; trans. by Joseph Solomon in *The Complete Works of Aristotle*, ed. by Jonathan Barnes (Princeton: Princeton University Press, 1984), p. 4142).

51 Cf. the translations *ad locum* by John I. Beare, "On memory", *The Complete Works of Aristotle,* pp. 714–20; Sorabji, *Aristotle on Memory*; Bloch, *Aristotle on Memory*.

objects of knowledge or sense perception, as translated above by Sophonias. Such an interpretation is still plausible and perhaps more straightforward, and it is indeed Michael's own rendering of the text[52] quoted here almost verbatim by Sophonias. Moreover, rather noteworthy in this short passage is the appearance of the verb προσεννοῇ. As has already been observed (pp. 209-210), this and similar thinking-verbs were repeatedly used in Michael's account of memory instead of Aristotle's sense-verbs, as a means of indicating the indispensable involvement of the reasoning part of the soul in the mnemonic process and emphasising its role in human memory. The frequent appearance of verb forms like προσεννοοῦμεν (2.32), μὴ προσεννοούμενος (6.13), συνεννοῆσαι (8.31), συνεννοεῖν (12.30) etc. in the paraphrase clearly depicts Michael's influence, since they are typical of Michael's comments and reminiscent of his views on memory but not found even once in the Aristotelian text. It seems that Sophonias adopted those terms on purpose, due to Michael's emphasis on that aspect of memory, since he also included Michael's important remark on the close entanglement of νοῦς and φαντασία.[53]

Another feature of the paraphrase that shows its affiliation to Michael's commentary is the integration of every single example offered there. Sophonias values examples and analogies as an aid to understanding the text and he often further expands them or even adds a few. In general, though, his contributions are minor, since he merely adds a few explanatory phrases or slightly rearranges Michael's text. An interesting passage that stands out comes from Sophonias' reciting of the example Michael uses to discuss memory in the case of animals. Michael suggests that although animals that can remember can subsequently perceive time as well, they perceive it in a much simpler way than human beings do. For instance, upon looking today at a hole it fell into last year, a donkey would remember that it has fallen in before and would avoid the hole. All that brute animals can remember is that something has happened to them before, in an indefinite way, whereas human beings are capable of telling with greater precision when exactly something happened (for example, yesterday), and thus determine the time of their memories. Further, human beings know the difference between present and future, a distinction that other animals do not have (*In De mem.* 8.9–17).[54]

On the other hand, Aristotle's explanation is supposed to hold uniformly in the case of all those animals that exhibit memory, including humans, and differences

52 Michael, *In De mem.*, 7.12–13: λέγει δὲ ἔργα τοδὶ τὸ ζῷον ἢ τὸ κυρίως ἢ τὸ γεγραμμένον, ὁμοίως καὶ τρίγωνον τὸ γεγραμμένον ἐν τῷδε τῷ βιβλίῳ.

53 Sophonias, *In De mem.*, 2.26–28: ὁ γὰρ νοῦς συμπλέκεται τῇ φαντασίᾳ κἀκ τῶν ἐν αὐτῇ παρὰ τῆς ἐνεργείᾳ αἰσθήσεως γεγραμμένων τύπων ἀποσυλᾷ τὰ καθόλου; Cf. Michael, *In De mem.*, 9.3–7.

54 τουτέστι δι' ὃ τότε ἐστὶ καὶ λέγεται μνήμη, ὅταν αἰσθάνηται καὶ τοῦ χρόνου, ὅτι χθὲς ἢ ὅλως πρότερον εἶδον ἢ ἤκουσα. καὶ ἐπεὶ τότε γίνεται μνήμη, ὅτε χρόνου αἴσθησις, ὅσα χρόνου αἰσθάνεται, ταῦτα καὶ μνημονεύει. ὁ γὰρ πεπτωκὼς ὄνος πέρυσιν εἰς τόνδε τὸν βόθρον, τήμερον δὲ ἰδὼν αὐτὸν καὶ ἀναχωρήσας, ᾔσθετο, ὅτι πρότερον πέπτωκεν ἐν αὐτῷ. αἰσθάνεται οὖν καὶ τὰ λοιπὰ τοῦ χρόνου, ἀλλ' οὐχ ὁμοίως τοῖς ἀνθρώποις· ὁ μὲν γὰρ ἄνθρωπος πρὸς τῷ αἰσθάνεσθαι, πότε εἶδε καὶ πότε ἤκουσεν, οἶδε καὶ τὴν διαφορὰν τοῦ παρεληλυθότος καὶ μέλλοντος, τὰ δ' ἄλογα τούτου μόνου αἰσθάνεται τοῦ ὅτι νῦν πίπτει ἢ πέπτωκε, τοῦ δὲ μέλλοντος ἔννοιαν οὐκ ἴσχει.

such as the above are not presupposed.[55] Sophonias paraphrases Michael's example, but he expands it by adding some further remarks:

> If the donkey that fell in this hole last year notices the hole today and avoids it, the donkey remembers that he fell in it before, yet remembers in a different way. For man not only perceives when he saw or heard something, but he also understands the difference of past and future time, whereas animals can tell only this: whether they are falling now or they have fallen before. Man is also aware of the fact that he is remembering, whereas animals are not. Moreover, some animals have a clearer imagination, and thus better memory, such as the bee, the dove, and the like, but in others, such as flies, worms, and the like, imagination is blurry and therefore they are incapable of remembering.[56]

With the above passage, Sophonias complements Michael's account with two additional points. The first is an extra difference between human and animal memory, namely that when he remembers man has some kind of self-awareness of the fact that he is remembering, something that does not hold in the case of other animals. That remark comes neither from Aristotle nor from Michael, although it does not contradict the account of the latter. It is one of the scarce occasions where Sophonias adds his own intuition to his composition. What is more, he presents an additional difference of animal memory. As he observes, even within the animal kingdom there are still some species that do not have the capacity of memory (such as worms and flies); also, amongst those that do have that capacity, there are some (such as bees and doves) that have better memory than the rest. Sophonias also explains briefly the differences in the mnemonic capacities of various animals by alluding to the difference in the relevant capacity of φαντασία, which for some animals is rather blurry (συγκεχυμένην). He is more confident in including information on the subject of φαντασία, since he draws from his own paraphrase of Aristotle's *De anima*. As he explains there (*In De anima* 55.27–36), animals such as ants and bees have φαντασία, but in others, like worms and flies, φαντασία is weak or faint or they do not have it at all (ἢ οὐ δοκοῦσιν ὅλως ἔχειν ἢ ἀμυδράν τινα). Sophonias picks up Michael's emphasis on the role of φαντασία for the understanding of memory and, along the same lines, brings in relevant material from his own previous work.

As it turns out, though, Sophonias does not fully understand Michael's deviations from Aristotle's text and he often misses Michael's deliberate adjustments. Even though he is certainly influenced by Michael's general remarks, he does not follow in detail

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55 Similar passages where Aristotle makes memory available to non-human animals are *Historia animalium* 1, 488b25–26 and *Metaphysica* 1.1, 980b21–27.

56 Sophonias, *In De mem.*, 2.12–20: ὁ γὰρ πεπτωκὼς πέρυσιν εἰς τόνδε τὸν βόθρον ὄνος, σήμερον δὲ ἰδὼν καὶ ἀναχωρήσας μέμνηται ὅτι πρῶτον πέπτωκε, διαφέρει μέντοι· ὁ μὲν γὰρ ἄνθρωπος πρὸς τῷ συναισθάνεσθαι, πότε εἶδεν ἢ ἤκουσεν, οἶδε καὶ τὴν διαφορὰν πρὸς τὸν παρεληλυθότα τοῦ μέλλοντος, τὰ δ' ἄλογα τοῦτο μόνον ὅτι νῦν πίπτει ἢ πάλαι πέπτωκε, καὶ ὁ μὲν ἑαυτοῦ συναισθάνεται μνημονεύοντος, τὰ δὲ οὔ· ἔτι τῶν ἀλόγων τὰ μὲν τὴν φαντασίαν καθαρώτερα καὶ μνημονικώτερα ὡς μέλισσα καὶ περιστερὰ καὶ τὰ ὅμοια, τὰ δὲ συγκεχυμένην ἔχοντα ὡς μυῖαι καὶ σκώληκες ἀμνήμονα.

all of his alterations. For instance, this is the case for how he deals with Michael's emendation and explanation of the *De memoria* lines 450a15–19 quoted bellow:

> Therefore, it belongs also to some of the other animals and not only to man and to those animals that possess opinion or intelligence (καὶ οὐ μόνον ἀνθρώποις καὶ τοῖς ἔχουσι δόξαν ἢ φρόνησιν). If it were one of the thinking parts, many of the other animals would not possess it (probably no mortal creature would) (ἴσως δ' οὐδενὶ τῶν θνητῶν), since even now it does not belong to all, because not all animals have a sense of time.[57]

This passage is disputed, because it is difficult for interpreters to make sense of the manuscript reading θνητῶν, so various alternatives have been suggested.[58] In addition, while the expression καὶ τοῖς ἔχουσι δόξαν ἢ φρόνησιν should be understood as explanatory ("that have opinion or intelligence"), the conjunction καὶ creates significant difficulty. Michael, in his comment *ad locum* (*In De mem.* 13.5–12), takes that last phrase as explanatory and omits the καί, while he substitutes the word θνητῶν with the word ἀλόγων, an emendation equally plausible with respect to the sense evoked as those of modern scholars. Still, Sophonias' rendering of the passage reads as follows:

> This is why [memory] also belongs to some other animals, and not only to men and to those animals that have opinion and intelligence (καὶ τοῖς ἔχουσι δόξαν ἢ φρόνησιν). If, though, it belonged to one of the thinking parts of the soul, many animals would lack it, and maybe none of those who do not partake in reason (ἴσως δ' οὐδενὶ τῶν ἀλόγων) would have it, because neither can all of these perceive time.[59]

In the above passage, Sophonias adopts Michael's emendation ἀλόγων, but he either does not notice the omission of the καὶ or he considers it trivial. In any case, he recites Aristotle's phrasing. Moreover, by deviating from Michael, his explanation is unsatisfactory (are there non-human animals that have intelligence?) and it is quite unclear how he means to elucidate the text by suggesting that there are animals that do not partake in reason and do not perceive time either.

Sophonias subsequently bases the paraphrase's section on recollection on Michael's exegesis of the process. He adopts most of the key features of Michael's definition as well as his explanation of recollection. Both elements appear repeatedly throughout the relevant part of his paraphrase. Briefly, forgetfulness (λήθη), which is completely

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57 Trans. by Bloch, *Aristotle on Memory*, p. 29.

58 διὸ καὶ ἑτέροις τισὶν ὑπάρχει τῶν ζῴων, καὶ οὐ μόνον ἀνθρώποις καὶ τοῖς ἔχουσι δόξαν ἢ φρόνησιν. εἰ δὲ τῶν νοητικῶν τι μορίων ἦν, οὐκ ἂν ὑπῆρχε πολλοῖς τῶν ἄλλων ζῴων, ἴσως δ' οὐδενὶ τῶν ἀνοήτων, ἐπεὶ οὐδὲ νῦν πᾶσι διὰ τὸ μὴ πάντα χρόνου αἴσθησιν ἔχειν. David Bloch in his edition follows θνητῶν; Aurèl Förster proposes ἀνοήτων and David Ross follows him in his edition; Peter Rassow proposes θηρίων; see Aristotle, *Parva naturalia*, ed. by William David Ross (Oxford: Clarendon Press, 1955). For the passage's various interpretations, cf. Sorabji, *Aristotle on Memory*, p. 79; Bloch, *Aristotle on Memory*, p. 231.

59 Sophonias, *In De mem.*, 4.4–8: διὸ καὶ ἑτέροις τισὶν ὑπάρχει τῶν ζῴων καὶ οὐ μόνον ἀνθρώποις καὶ τοῖς ἔχουσι δόξαν καὶ φρόνησιν. εἰ δὲ καὶ τῶν νοητικῶν τινος μορίων ἦν καὶ τῆς λογικῆς ψυχῆς, οὐκ ἂν ὑπῆρχε πολλοῖς τῶν ζῴων, ἴσως δὲ οὐδενὶ τῶν ἀλόγων διὰ τὸ μηδὲ νῦν πᾶσι τῷ μὴ πάντα χρόνου αἴσθησιν ἔχειν.

absent from Aristotle's text, features also in Sophonias' definition of recollection. He stresses that it is indispensable if we are to speak of recollection:

> We do not say that someone recollects (…) when he stores a memory completely without the intervention of forgetfulness, but we say that a person recollects only when earlier he was storing the entire memory, then he lost some part of it and kept a part, and from the safe part he recovered the rest.[60]

Moreover, the terms and phrases used in the paraphrase to refer to recollection derive from Michael's language on the subject. Thus, recollection is described as a "re-sketch of a previous memory" (ἀναζωγράφημα, 7.28–29) and as "memory's renewal" (μνήμης ἀνανέωσις, 8.14),[61] in lieu of the familiar Aristotelian term ἀνάληψις (recovery). Besides, recollection is some kind of memory, since, similarly to Michael, Sophonias writes that "he who recollects, in some way remembers."[62] Nevertheless, Michael's original understanding of recollection as a deliberate process that requires a seeking agent is not to be found in Sophonias. As presented above, that intuition causes Michael's subtle alteration of the original text in his reading of a difficult Aristotelian passage about the means of recollecting (451b22–24). Sophonias' paraphrase of the same passage clearly shows that he has not grasped Michael's distinctive approach:

> This is how recollection occurs for those who seek to recollect: it occurs through the ways we have already described, that is through the similar, or the opposite or the closely connected. On the other hand, when they are being reminded without having searched, recollection does not occur in the same way.[63]

Sophonias paraphrases the passage by construing ἀναμιμνήσκονται as passive (ἀναμνησθῆναι). In other words, he takes the second clause to describe a case of being reminded without having searched. According to Michael, though, the second case was that of people who might possibly come to recollect via different means than the usual, but who were still purposefully trying to bring something back to mind. Unlike Michael, Sophonias does not seem to have a general, more detailed theory in mind, nor does he strive to interpret the text in a coherent manner. He simply employs the smoothest and most straightforward reading of the Greek. By doing so, he deviates from Michael's work, even though he generally depends greatly on him for his paraphrase.[64]

In general, Sophonias' paraphrase is heavily influenced by Michael's interpretations of the Aristotelian account of memory. He adopts many of his readings and repeats

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60 Sophonias, *In De mem.*, 7.13–18: οὔτε γὰρ ἀναμιμνήσκεσθαι λέγομεν τὸν (…) σῴζοντα δὲ τὴν μνήμην λήθης μηδαμῶς μεσολαβησάσης, ἀλλὰ τὸν πρότερον μὲν ἔχοντα σῷον ἅπαν, ὕστερον δὲ τὸ μὲν ἀποβαλόντα τὸ δὲ σῴζοντα, ἐκ δὲ τοῦ σῳζομένου τὸ λοιπὸν ἀναλαμβάνοντα.

61 For the use of the terms ἀνανέωσις, ἀναζωγράφημα, ἀναζωγράφησις, cf. Michael's comment on *De mem.*, 451a18, cited above (p. 211).

62 Sophonias, *In De mem.*, 8.9–10: ὁ γὰρ ἀναμνησθεὶς τρόπον τινὰ ἐμνήσθη (cf. Michael's *In De mem.*, 20.11–13).

63 Sophonias, *In De mem.*, 9.26–10.2: ζητοῦσι μὲν οὖν οὕτω γίνεται ἡ ἀνάμνησις, ἀφ' ὥνπερ εἴπομεν, ἀπὸ τῶν ὁμοίων ἢ τῶν ἀντικειμένων ἢ τῶν ἐγγύς· ὅταν δὲ μὴ ζητοῦσιν ἀναμνησθῆναί του γένηται, ἐξ οὐδενὸς τούτων.

64 Cf. Bloch, *Aristotle on Memory*, p. 15.

various points that Michael emphatically stresses in his commentary. Even so, minor changes by Michael or less straightforward intuitions evade him. He only randomly integrates Michael's comments and, as a result, his paraphrase is not coherent and overall it is much less convincing in comparison to the commentary that precedes it.

4. Theodore Metochites

Theodore Metochites (1270–1332) was a scholar and a statesman. Despite his various demanding administrative duties, he managed to compose many scholarly works, which include texts of various literary types, from extant philosophical essays to orations and poems.[65] Except for his letters, which were burnt in the fire of the Escorial library, the rest of his writings survive. His paraphrase on the *De memoria* is included in the collection *Paraphrases of Aristotle's Writings on Natural Philosophy* (39 books), along with paraphrases of the rest of the *Parva naturalia* treatises and also of the *Physica*, the *De anima*, the *De caelo*, the *De generatione et corruptione*, the *De motu animalium*, the *De incessu animalium*, the *De partibus animalium*, the *De generatione animalium*, and the *Meteorologica*. The above collection was probably published *c.* 1320, and was translated into Latin in the sixteenth century by Gentian Hervet. For only three, though, of the included paraphrases has the original Greek text been edited and published in modern editions, namely the paraphrase of the *De somno et vigilia*, that of the *De memoria*, and more recently that of the *De divinatione*.[66]

The affiliation of Metochites' paraphrases of the *Parva naturalia* to the commentary by Michael of Ephesus on the same Aristotelian treatises is old news: Drossaart Lulofs provided solid evidence for the dependence of Metochites' paraphrase of the *De somno et vigilia* in his edition, and he eventually decided not to publish the edition he had been preparing of Metochites' *De insomniis* and *De divinatione per somnum* when he realised with disappointment that they were actually faithful paraphrases of Michael's

65 For general information on Metochites' life and works, cf. *Stoicheiosis Astronomike and the Study of Natural Philosophy and Mathematics in Early Palaiologan Byzantium*, ed. by Börje Bydén, Studia Graeca et Latina Gothoburgensia, 66 (Gothenburg: University of Gothenburg, 2003), pp. 34–37; Börje Bydén, "Theodore Metochites," in *Encyclopedia of Medieval Philosophy*, ed. by Henrik Lagerlund (Dordrecht: Springer, 2011), pp. 1266–69. I would like to thank Börje Bydén for his helpful comments on an earlier version of this section.

66 *Aristotelis De somno et vigilia liber adiectis veteribus translationibus et Theodori Metochitae commentario*, ed. by Hendrik Joan Drossaart Lulofs (Leiden: Burgersdijk & Niermans, 1943), pp. 13–22; ed. by David Bloch in "Theodore Metochites on Aristotle's *De memoria*. An Edition," *Cahiers de l'Institut du Moyen-Âge Grec et Latin*, 76 (2005), pp. 3–30: https://cimagl.saxo.ku.dk/download/76/76Bloch3–30.pdf; John A. Demetrakopoulos, "George Gennadios II–Scholarios' Abridgment of the *Parva Naturalia* and its Place in his Oeuvre," in Bydén and Radovic (eds.), *The 'Parva Naturalia'*, pp. 233–315 (pp. 292–97), (although Demetrakopoulos' is not a proper critical edition). The *editio princeps* of Metochites' paraphrase of the *De anima* is being prepared for publication in the series *Commentaria in Aristotelem Graeca et Byzantina* (BBAW, De Gruyter) by Börje Bydén.

comments on the same texts.[67] That the same holds for the case of Metochites' *De memoria* paraphrase is confirmed by David Bloch, in his introduction to the edition of the text. Bloch particularly highlights as the most noticeable resemblance the integration of Michael's characteristic examples (mentioned above) into Metochites' work.[68]

In general, Metochites' style of paraphrase is very similar to Sophonias', but his work belongs even more strictly in the genre of paraphrase since he consistently avoids quoting long passages directly from Aristotle.[69] That is to say, Metochites writes indeed a paraphrase (*vero paraphrasin*), following the rules established by Themistius, the inventor of the genre.[70] In the introduction that precedes his paraphrases of Aristotle's natural philosophy, Metochites explicitly states the aim of his composition: he wished to help those interested in the Aristotelian views who would otherwise have been discouraged by Aristotle's labyrinthine and complex manner of expression.[71] Thus, he mostly focuses on the important concepts, and often repeats his descriptions and definitions again and again, in what he considers a "definitional" (ὁριστικῶς) kind of paraphrase. As a result, the paraphrase is long, talkative, and monotonous,[72] while the difficult details of the original text remain unexplained. While he is generally critical of Aristotle, he does not speak in his own words in this paraphrase; he just presents straightforwardly the Aristotelian ideas, even though on the subject of memory he clearly expresses different views in other writings.[73]

Regarding Michael's views on memory and recollection, it turns out that Metochites' case is very similar to that of Sophonias. That is to say, Metochites endorses many of Michael's readings that spring from his general views, and the influence of the former scholar's interpretation is reflected in Metochites' vocabulary choices. Yet, he certainly does not grasp Michael's broader interpretive effort. Hence, his employment of Michael's comments is arbitrary, while his preference of one of his readings over another is often without good reason. In particular, in his description of the formation

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67 See Drossaart Lulofs (ed.), *Aristotelis De somno et vigilia*, pp. xxiv, xxvii, 24–36; *Aristotelis de insomniis et de divinatione per somnum*, ed. by Hendrik Joan Drossaart Lulofs (Leiden: Brill, 1947), vol. 1, p. lxxvii.

68 See Bloch, "Theodore Metochites," pp. 3–4, esp. n. 6, for an indicative list of Michael's examples incorporated in Metochites' paraphrase.

69 For a comparison of Metochites' with Sophonias' style, see Bydén, "Literary Innovation," esp. section seven. Theodore Metochites, *In De anima*, 2.1.

70 See Drossaart Lulofs (ed.), *Aristotelis De somno et vigilia*, pp. xxiii–xxiv.

71 Drossaart Lulofs (ed.), *Aristotelis De somno et vigilia*, pp. 11–12; 12.9-10: τὸ λαβυρινθῶδες ἐνταῦθα καὶ δυσδιεξίτητον ὀκλάζειν ἀναγκάζει καὶ ἀποτρέπεσθαι. As Börje Bydén observes, though, Metochites is among those writers who defend Aristotelian obscurity by explaining it as a means of discerning the strong students, see Börje Bydén, "No Prince of Perfection: Byzantine Anti-Aristotelianism from the Patristic Period to Pletho," in *Power and Subversion in Byzantium: Papers from the 43rd Spring Symposium of Byzantine studies, Birmingham, March 2010*, ed. by Michael Saxby and Dimiter Angelov, Publications of the Society for the Promotion of Byzantine Studies (Farnham: Ashgate, 2013), pp. 147–76 (pp. 155–56, n. 35). Cf. also Bydén, *Stoicheiosis astronomike*, pp. 61–69, on the same subject.

72 For the style of Metochites' prose, see Börje Bydén's essay in Karin Hult and Börje Bydén, *Theodore Metochites on Ancient Authors and Philosophy: Semeioseis gnomikai 1–26 & 71*, Studia Graeca et Latina Gothoburgensia, 65 (Gothenburg: University of Gothenburg, 2002), pp. 273–88.

73 Cf. Bloch, "Theodore Metochites," pp. 5–6.

of memory, Metochites (like Sophonias before him) uses words and expressions that imply involvement of some kind of rationality. For instance, we come across the verb συννοεῖται or the equivalent expression εἰς νοῦν ἔχοι[74] in his explanation of how the passage of time has to be perceived in parallel with the imprint in the soul produced by φαντασία in order to properly speak about memory. Furthermore, he substitutes the phrase καθόλου λογικὴν γνῶσιν (rational knowledge in general, as opposed to perception) for the Aristotelian ὑπόληψις,[75] following Michael's understanding of the term with respect to the *De anima* 427b25–28 (see above, pp. 208-209). However, one should note that Metochites is very careful in dealing with his sources, and is very well acquainted with the relevant passage of the *De anima* to which Michael alludes. It is indicative of this that he himself completes the list of the varieties of ὑπόληψις by adding understanding (καὶ κατὰ τῆς ἐπιστήμης), according to the passage in the *De anima*.[76]

In the discussion of recollection (Metochites, *In De mem.* 20–29) Michael's interpretation again prevails. In other words, Metochites explains recollection as memory's way of acquiring anew (ἀνανέωσιν) a mnemonic imprint that was clear and distinct before being forgotten and thereby becoming partly darkened and faint. Paraphrasing Michael instead of Aristotle, Metochites notes that the clear parts of the memory image that are still preserved in the soul (τὰ μὲν εἶναι τῆς μνήμης μένοντα τρανὰ καὶ σαφῆ) have the power to move and in some way awaken or recover the rest (τὰ δὲ ἀμυδρὰ εἶναι καὶ οἷον ἐζοφωμένα), which were obscured by forgetfulness (ὅταν λήθη τις ἐμπεσοῦσα τὴν συνέχειαν διαλύσῃ τῆς ὅλης μνήμης). As such, recollection is a kind of memory:

> If then some parts remain and are preserved and can be discerned as distinct and clear, while other parts are darkened due to forgetfulness, and through those parts that are safe and discernible the non-obvious and darkened ones are renewed, and one can work out and complete all their prior continuity, this is recollection; thus it seems that recollection is some kind of memory.[77]

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74 Metochites, *In De mem.*, 13: ἅμα γὰρ τῇ μνήμῃ τοῦ μνημονευτοῦ καὶ ὁ χρόνος συννοεῖται; 12: ἂν δὲ χρόνῳ ὕστερον μετὰ τὰς ἐνεργείας ἅπερ ἑώρακεν <ἢ> ἅπερ ἔμαθεν (…) εἰς νοῦν ἔχοι.

75 Metochites, *In De mem.*, 12–13: διαλαβὼν οὖν οὕτω περὶ τῶν μνημονευτῶν ἐξῆς αὐτὴν τὴν μνήμην διοριζόμενός φησι μήτε αἴσθησιν εἶναι ταύτην μήτε ὅλως ὑπόληψιν, ἤτοι καθόλου λογικὴν γνῶσιν (ἡ γὰρ ὑπόληψις καὶ κατὰ τῆς δόξης λέγεται καὶ κατὰ τῆς νοήσεως καὶ κατὰ τῆς ἐπιστήμης, αὗται δέ εἰσιν ἐν ταῖς νῦν ἑκάστοτε ἐνεργείαις, καθὼς εἴρηται).

76 In general, Metochites refers to the *De anima* very often throughout his commentary, both explicitly (pp. 1, 12: *DA*, 414a14–22/402b10–16 /418a7–8; p. 14: *DA*, 3.3; p. 15: *DA*, 431a16–17; p. 16: *DA*, 418a7–25) and implicitly (pp. 12–13: *DA*, 427b25–28; p. 13: *DA*, 418a7–25). This indicates that he knew it very well and probably the commentary tradition related to it. David Bloch ("Theodore Metochites," p. 4) mentions that in referring to the *De anima* Metochites may be referring to his own paraphrases, but as we will argue he is probably more influenced by other paraphrases.

77 Metochites, *In De mem.*, 20–21: ἂν δὲ τὰ μὲν μένῃ καὶ διασώζηται καὶ φαίνηται τρανὰ καὶ καθαρά, τὰ δὲ ἠμαυρώθη τῇ λήθῃ, καὶ διὰ τῶν περισωζομένων καὶ φανερῶν τὰ μὴ δῆλα καὶ ἠμαυρωμένα ἀνανεῶνται καὶ συμπεραίνῃ καὶ ἀπαρτίζῃ τις ὅλην τὴν προτέραν συνέχειαν αὐτῶν, τοῦτ' ἔστιν ἀνάμνησις· καὶ ἔοικεν εἶναι λοιπὸν μνήμη τις ἡ ἀνάμνησις. The passages on recollection are typical of Metochites method of explanation by repeatedly paraphrasing the same thing. Cf. Metochites, *In De mem.*, 20: ὅτι τὴν ἀνάμνησιν

By and large, Metochites' dependence on Michael of Ephesus for his work on the *De memoria* is once again confirmed.

Nonetheless, there are passages in his paraphrase the origin of which is not to be traced back to Aristotle's treatise nor to Michael's comments on it. For instance, in paraphrasing the Aristotelian passage 449b31–450a5[78] Metochites brings in various details for which the Michaelian commentary is not sufficient as its source. In this part of the treatise Aristotle makes a parenthetical remark on the importance of images for thought. By immediately alluding to the *De anima*,[79] he explains that images (φαντάσματα) are indispensable for thinking and that even in the thought of something intelligible, which is not of a specific quantity, a specific quantity is nevertheless invoked as an aid to the thinking power of the soul (νοῦς). Michael's comment on this part of the text[80] briefly remarks (from a Platonic point of view) that φαντασία is indeed always involved in thinking, but this is not always an aid. Φαντασία often hinders the intellect by bringing in shapes and sizes in the contemplation of intelligible and divine objects (περιέλκεται ὁ νοῦς ὑπὸ τῆς φαντασίας σχήματα καὶ μεγέθη φανταζομένης). On the other hand, Metochites complements his paraphrase of the relevant passage of the *De memoria* as follows:

> There is no such thing, then, as thinking and deducing absolutely without imagination, and even if reason (ὁ νοῦς) does not bring a quantity to mind — thus does not think of something *as* quantity either — still in thinking whatsoever quantity follows along and coappears. Therefore, reason wants to consider about white or black (καὶ τὸ μέλαν) colour what kind of thing is it (since in any case it is not in itself quantity, neither is it categorised as quantity but rather as quality); but since white colour always belongs to some underlying subject, which is inseparable from size and quantity, even if it does not belong to it because of itself but accidentally, the conception of quantity accompanies the contemplation of white colour…[81]

βούλεται καὶ διορίζεται ὁ Ἀριστοτέλης εἶναι ἀνανέωσιν τῆς προτέρας μνήμης, ὅταν λήθη τις ἐμπεσοῦσα τὴν συνέχειαν διαλύσῃ τῆς ὅλης μνήμης, ὥστε τὰ μὲν εἶναι τῆς μνήμης μένοντα τρανὰ καὶ σαφῆ, τὰ δὲ ἀμυδρὰ εἶναι καὶ οἷον ἐζοφωμένα, ὥσπερ ἂν εἴ τινος ζῴου γραφὴν καὶ εἰκόνα συμβαίη, τὰ μὲν τοῦ εἰκάσματος καὶ τοῦ τύπου διασώζειν φανερῶς ἐγνωσμένα, τινὰ δὲ μόρια αὐτοῦ ἐζοφωμένα καὶ ἀμυδρὰ καὶ μὴ διασημαίνοντα ἔχειν. ὅταν γὰρ οὕτως ἔχωσι τὰ τῆς γραφῆς, ἴσως, ἂν ἀπὸ τῶν ἐγνωσμένων αὐτῆς καὶ φανερῶν συνάγηται καὶ καταλαμβάνηται καὶ τὰ μὴ δῆλα, καὶ ἀνατυποῖ τις καὶ ἀνανεοῦται τὴν ὅλην οὕτω γραφήν.

78 Aristotle, *Mem.*, 449b31–450a5: ἐπεὶ δὲ περὶ φαντασίας εἴρηται πρότερον ἐν τοῖς περὶ ψυχῆς, καὶ νοεῖν οὐκ ἔστιν ἄνευ φαντάσματος — συμβαίνει γὰρ τὸ αὐτὸ πάθος ἐν τῷ νοεῖν ὅπερ καὶ ἐν τῷ διαγράφειν· ἐκεῖ τε γὰρ οὐθὲν προσχρώμενοι τῷ τὸ ποσὸν ὡρισμένον εἶναι τοῦ τριγώνου, ὅμως γράφομεν ὡρισμένον κατὰ τὸ ποσόν, καὶ ὁ νοῶν ὡσαύτως, κἂν μὴ ποσὸν νοῇ, τίθεται πρὸ ὀμμάτων ποσόν, νοεῖ δ' οὐχ ᾗ ποσόν.

79 For the statement that images are indispensable for thinking, cf. especially *De anima,* 3.7, 431a16–17; 3. 7, 431b2; 3.8, 432a8–10. For φαντασία in general, *De anima,* 3.3, *passim*.

80 Michael, *In De mem.*, 12.16–22: χωρὶς γὰρ φαντασίας οὐδὲν ὁ νοῦς νοεῖ ἢ συνεργούσης ἢ ἐμποδιζούσης, τὰ μὲν συνεργούσης ὡς ἐπὶ τῶν μαθημάτων (…) τὰ δὲ καὶ ἐμποδιζούσης, ὡς ἐπὶ τῆς τῶν νοητῶν τε καὶ θείων θεωρίας· ἐν γὰρ τῇ τούτων θεωρίᾳ περιέλκεται ὁ νοῦς ὑπὸ τῆς φαντασίας σχήματα καὶ μεγέθη φανταζομένης καὶ μὴ συγχωρούσης ἐκείνων εἰλικρινῶς ἀντιλαμβάνεσθαι.

81 Metochites, *In De mem.*, 15: καὶ οὐχ οἷόν τ' ἐστὶ νοεῖν καὶ συλλογίζεσθαι παντάπασι ἀπηλλαγμένως τῆς φαντασίας, κἂν εἰ μὴ ποσὸν ὁ νοῦς προτιθείη οὐδ' ἄρα νοοίη τι ᾗ ποσόν, ὅμως ἐν τῷ νοεῖν ὁτιοῦν συνακολουθεῖ καὶ συναναφαίνεται καὶ ποσόν. βούλεται μὲν γὰρ τὸ λευκὸν καὶ τὸ μέλαν θεωρεῖν ὅτι ποτ' ἐστὶν ὅπερ οὐκ

The novel example in the above passage is about reason's effort to contemplate colours like white and black without thinking of them as attached to a particular subject (for instance *white* as in a white surface), but merely *per se* (namely pure *whiteness*, or *blackness*). Its presence in the paraphrase is rather arbitrary. What is more, in his *apparatus criticus* of the edition, David Bloch suggests deleting the reference to the colour black (καὶ τὸ μέλαν), since the words are not found in the example that follows below.[82]

What seems to explain the presence of this example and the reference to the colours white and black in the text is Sophonias' paraphrase of the same work. In his paraphrase Sophonias expands Michael's comment by elaborating on two of his points (*In De mem.* 3.12–31). He makes explicit the reference to Plato's relevant criticism of φαντασία in his dialogue *Phaedo*, where the body's presence is considered an obstacle which prevents one from seeing the truth and causes confusion.[83] Furthermore, he adds colours along with shapes and sizes to Michael's list of images that intervene in the thinking process due to the entanglement of φαντασία with νοῦς (3.28–30: ἐμποδίζει δὲ πρὸς τὴν θεωρίαν τῶν νοητῶν καὶ θείων σχήματα καὶ μεγέθη καὶ χρώματα παρεισάγουσα). Along these lines, he introduces an example in order to illustrate how one can contemplate the nature of a colour *per se*, without it being attached to some material object that is of specific quantity: such contemplation occurs — he says — when one thinks about how white is a piercing colour and black a compressing colour (ἀλλ' οὐχ ᾗ ποσά, ἀλλ' ᾗ τὸ μὲν λευκὸν διακριτικὸν ὄψεως, τὸ δὲ μέλαν συγκριτικόν). In fact, Sophonias extracts his example from Aristotle's *Metaphysica* 10, 1057b8–9.[84] Both the above additional points that were used to enrich and explain Michael's comment on the passage are not novel, but they come from Sophonias' *De anima* paraphrase (*In De anima*, 120.9–121.26). As was previously shown (p. 217), he similarly employed that work on other occasions as a means of complementing Michael's main authority as a source. Thus, the presence of the exact same example regarding white and black colours in Metochites' paraphrase could plausibly be explained by his work as a meticulous philologist, who attends to every relevant source available to him.

Analogous evidence for Metochites' integration of Sophonias' readings in his paraphrase comes from the part on recollection. As already explained (pp. 212-213), recollection for Michael is always deliberate, so that he interpolates accordingly the Aristotelian text, and particularly the *De memoria* passage 451b22–24, in order to provide coherence to his account. Metochites reading of the passage is different,

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ἔστι πάντως καθ' αὑτὸ ποσόν, οὐδ' ὑπὸ γένος τὸ ποσὸν ἀνάγεται ἀλλὰ μᾶλλον ὑπὸ τὸ ποιόν, ἐπεὶ δ' ἀεὶ τὸ λευκὸν ἐν ὑποκειμένῳ τινί ἐστιν, ὃ καὶ μεγέθους καὶ ποσοῦ μετέχει ἀχωρίστως — καὶ εἰ μὴ καθ' αὑτὸ ἀλλὰ κατὰ συμβεβηκός — συνέπεται τῇ τοῦ λευκοῦ θεωρίᾳ καὶ ἡ τοῦ ποσοῦ ἔννοια (…).

82 Bloch, "Theodore Metochites," p. 15, n. 5.

83 Sophonias, *In De mem.*, 3.16–17: καὶ ἀληθές, ὅ φησιν ὁ Πλάτων περὶ τῆς φαντασίας, ὡς ταῖς τοῦ νοῦ συνημμένη νοήσεσιν οὐκ ἐᾷ καθαρὰς ποιεῖσθαι; cf. Plato, *Phaedo*, 66d3–7.

84 ἐκ γὰρ τοῦ γένους καὶ τῶν διαφορῶν τὰ εἴδη (οἷον εἰ τὸ λευκὸν καὶ μέλαν ἐναντία, ἔστι δὲ τὸ μὲν διακριτικὸν χρῶμα τὸ δὲ συγκριτικὸν χρῶμα, αὗται αἱ διαφοραί, τὸ διακριτικὸν καὶ συγκριτικόν, πρότεραι· ὥστε ταῦτα ἐναντία ἀλλήλοις πρότερα).

since he allows for the occurrence of recollection without searching (καὶ χωρὶς ζητήσεως). He even adds a short gloss to explain how recollection can sometimes arise involuntarily as a reflex (αὐτομάτως) when one memory is connected with another in a consistent manner due to habit.

> Therefore, recollection occurs and is completed through searching from the aforementioned starting points. But sometimes also, without searching, after a movement and activity (that is the having of a memory) of one [imprint] follows another out of habit, we could say automatically.[85]

This construal is identical to the one offered by Sophonias' more straightforward reading of the Greek in this Aristotelian passage (p. 219), and it stands out as a striking deviation from Michael's alternative interpretation. Moreover, in this part of his paraphrase, Metochites (*In De mem.* 23–24) follows closely Sophonias' emphases on Michael's comments. Like Sophonias, he attests only Michael's second reading for not remembering the things that are "far apart" (τὰ πόρρω, *Mem.* 451b25–26), but both Michael's interpretations for recollection "from places" (ἀπὸ τόπων, *Mem.* 452a12–13).[86]

Therefore, Metochites is well acquainted with the commentary tradition of the *De memoria* and he composes his text with scrupulous attention to detail. Despite the literary zeal though, he is the first in the series of scholars of the Aristotelian treatise who does not contribute anything new with his paraphrase.

5. George (Gennadios) Scholarios

George Scholarios lived in the first half of the fifteenth century.[87] His primary interest was in theology, but he was also deeply interested in philosophy and he supported its compatibility with Christian thought. At a young age he was also teaching philosophy in small groups of students; it was probably for use in those courses — or reading groups (ἀναγνώσεις or ὁμιλίαι) — that he composed annotations (ἀποσημειώσεις) in Porphyry's *Isagoge* and in numerous Aristotelian works, such as the *Categoriae*, the *Physica*, the *De caelo*, the *De anima*, the *Parva naturalia* and the *Meteorologica*.

Scholarios considered himself a better Aristotelian commentator than his Byzantine forerunners, partly because of his additional excellent knowledge of the Latin literature. Nevertheless, apart from resorting to Medieval Latin authors, he often draws material for his works from ancient Greek and Byzantine commentators as

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85 Metochites, *In De mem.*, 23: γίνεται μὲν οὖν ἡ ἀνάμνησις διὰ ζητήσεως ἀπὸ τῶν εἰρημένων ἀφορμῶν καὶ ἀπαρτίζεται. ἐνίοτε δὲ καὶ χωρὶς ζητήσεως ἔπεται μεθ' ἑτέρου κίνησιν καὶ ἐνέργειαν (εἴτουν ἕξιν μνήμης) κατ' ἔθος τὸ ἐξῆς αὐτομάτως ὡς εἰπεῖν.

86 On *Mem.*, 451b25–26, cf. Michael: 27.20–28.4; Sophonias: 10.5–12; Metochites: 23. On *Mem.*, 452a12–13, cf. Michael: 28.6–14; Sophonias: 11.1–7; Metochites: 24.

87 For general information on George Scholarios' life and works, see John A. Demetrakopoulos, "George Scholarios (Gennadios II)," in *Encyclopedia of Medieval Philosophy*, ed. by Henrik Lagerlund (Dordrecht: Springer, 2011), pp. 397–99.

well. His work on the *De memoria*[88] consists, for the most part, of general comments on memory, and he basically reproduces verbatim Metochites' wording — with no explicit reference to him. The affiliation of the two texts is evident and has already been highlighted by contemporary scholars.[89] David Bloch notes as a characteristic example the vocabulary used in describing the typical Michaelian case of a donkey that remembers, which is the same both in Michael and Sophonias but slightly altered by Metochites and identically adopted by Scholarios.[90] A plethora of similar examples can easily be found. Indeed, the juxtaposition of the two texts shows that there is no single phrase in the text by Scholarios that does not have its counterpart in Metochites' paraphrase. The text of Scholarios only differs in style, being closer to the philosophical genre of compendium rather than to a standard paraphrase. As such, it is an abridged version of Metochites' extant paraphrase, a short summary that only briefly mentions the main themes of the Aristotelian treatise and completely lacks any detailed comments or lengthy explanations. As a result, Scholarios transforms Metochites' long-winded paraphrase (which occupies about twenty pages in Bloch's edition) and epitomises it in a three-page abridged version which consists in very succinct sentences.

Furthermore, there is no sign of personal preference on any of the discussed topics or problems in the way Scholarios structures the text. He dedicates roughly one page to memory, one to recollection, and one page to the concluding general Aristotelian comments, many of which the previous commentators did not explicate. This structure is merely expository. It does not reflect the emphasis put on certain aspects of the treatise by Michael and the Byzantine scholars who follow him. For instance, Metochites dedicates eight pages to expanding on the role of recollection, whereas in Scholarios the corresponding part is less than one page long. The final part is also almost one page long, occupying only three pages in Metochites' paraphrase.

Consequently, it is not surprising that the echo of Michael's views on the interpretation of the *De memoria* is beginning to fade away significantly. Especially in the case of memory, the definition by Scholarios is much closer to the Aristotelian definition than to Michael's. Like Aristotle, he brings forward the aspect of memory as storage in the soul of imprints provided by sense perception through φαντασία, and mentions the indispensable role of time.[91] There is no mention of the further requirement of recalling the stored images actively, which was added by Michael in

88 The edited text of Scholarios' complete work on the *Parva naturalia* is included in *Œuvres Complètes de Gennade Scholarios*, ed. by Louis Petit, Xénophon Sidéridès, and Martin Jugie (Paris: Maison de la Bonne Presse, 1936), vol. 7, pp. 455–57.

89 Cf. Drossaart Lulofs (ed.), *Aristotelis De somno et vigilia*, p. xxvii; Bloch, *Aristotle on Memory*, p. 15; John Monfasani, "George Gennadius II Scholarios and the West: Comments on Demetracopoulos, 'George Scholarios' Abridgement of the *Parva Naturalia*'," in *The 'Parva Naturalia' in Greek, Arabic and Latin Aristotelianism*, ed. by Börje Bydén and Filip Radovic (Dordrecht: Springer, 2018), pp. 317–23.

90 See Bloch, *Aristotle on Memory*, p. 15, n. 50.

91 Scholarios, *In De mem.*, 455.11–13: Ὅτι μνήμη ἐστὶ τῆς αἰσθήσεως ἢ τῆς ὑπολήψεως ἐγκατάλειμμα τῷ νῷ καὶ πάθος, καὶ ἕξις αὐτῶν μετὰ χρόνου, ἢ φαντάσματος ἕξις, ὃ φάντασμα εἰκών ἐστιν αἰσθήματος προτέρου. Cf. Metochites, *In De mem.*, 12–13.

his account of memory, nor of the explanation of the mnemonic process by means of movements in the soul that arouse one another when memory works properly (that is, without the intervention of forgetfulness). On the other hand, in the case of recollection we can trace again Michael's explanation of the process as the acquiring anew of the part of a certain memory, which was blurred and for some time lost due to partial forgetting, with the help of its still remaining clear part.[92] This is probably due to the fact that Metochites' reconstruction of Michael's account of recollection was much more explicit in his paraphrase and it was thus very unlikely to escape Scholarios' attention, whereas for memory Michael's influence was more subtle already in the text by Metochites.

6. George Pachymeres

The last commentator to be discussed, for a comprehensive overview of the Byzantine reception of the Aristotelian *De memoria*, is a contemporary of Sophonias, namely George Pachymeres (1242–*c.* 1310). He was a famous philosopher, historian, and copyist of Greek texts who also taught philosophy, was involved in politics, and pursued a clerical career.[93] His most well-known philosophical work, to which he mainly owes his philosophical reputation, is a voluminous compendium of Aristotle's philosophy entitled *Philosophia*. He additionally wrote running commentaries on ancient philosophical treatises, namely on the Aristotelian *Organon*, the *Physica*, the *Metaphysica*, and the *Nicomachean Ethics*, and on the second part of the Platonic *Parmenides*.

With the twelve books of his *Philosophia* Pachymeres intended to present the entire Aristotelian philosophy[94] in a simplified manner. The method he employed for presenting the Aristotelian corpus was to construct some kind of 'hybrid paraphrase', mainly by drawing immediately from Aristotle's treatises, paraphrasing what he chose to leave out and adding some necessary phrases to provide coherence, with only minor explanatory remarks. A large part of the Greek text of Pachymeres' *Philosophia* remains unedited, except for books 3, 5, 6, 10, and 11.[95] Still, according to the above and

92 Scholarios, *In De mem.*, 456.11–16: Ἀνάμνησις δέ ἐστιν ἀνανέωσις τῆς προτέρας μνήμης, ὅταν λήθη τις ἐμπεσοῦσα τὴν συνέχειαν διαλύσῃ τῆς ὅλης μνήμης, ὡς τὰ μὲν τῆς μνήμης εἶναι μένοντα τρανὰ καὶ σαφῆ, τὰ δὲ ἀμυδρὰ καὶ οἷον ἐξοφωμένα, καὶ διὰ τῶν σῳζωμένων καὶ φανερῶν τὰ μὴ δῆλα καὶ ἠμαυρωμένα ἀνανεοῦνται καὶ ὅλη αὐτῶν ἡ συνέχεια ἀπαρτίζεται· ὅθεν καὶ μνήμη τίς ἐστιν ἡ ἀνάμνησις. Cf. Metochites, *In De mem.*, 20–21 (and above, p. 222).

93 For general information on George Pachymeres' life and works, see George Zografidis, "George Pachymeres," in *Encyclopedia of Medieval Philosophy*, ed. by Henrik Lagerlund (Dordrecht: Springer, 2011), pp. 394–97; Pantelis Golitsis, "Pachymérès, Georgios," in *Dictionnaire des philosophes antiques*, ed. by Richard Goulet, vol. 7 (Paris: CNRS, 2018), pp. 627–32.

94 The only Aristotelian treatises that are excluded from *Philosophia* are the *Poetics*, the *Rhetoric*, and the *Historia animalium*.

95 The entire publication of Pachymeres' *Philosophia* is an ongoing project by the Academy of Athens, in the series *Commentaria in Aristotelem Byzantina* (CAB), as part of the *Corpus Philosophorum Medii Aevi*. The volumes that have been published so far are the following: *Georgios Pachymeres, Philosophia Book*

similarly to the existing editions of other books of the *Philosophia*, the *De memoria* part of the *Philosophia* seems to be relatively independent from Aristotle and Michael. Nevertheless, David Bloch[96] claims that Pachymeres' text does not contain anything original, and is thus philosophically uninteresting. *Philosophia* is more interesting as regards the thematic organisation of the subject matter in the compendium, according to which certain treatises are grouped together on the basis of their common topic. As a result of this organisational scheme, the 'paraphrase' of the *De memoria* is included in book eight (where it occupies about five and a half pages of Pachymeres' autograph manuscript)[97] along with the other paraphrases of the *Parva naturalia* and together with that of the *De motu animalium*.[98] More research is needed in order to properly assess Pachymeres' originality in discussing Aristotelian memory and the relation of his work to Michael's commentary on the same treatise.[99]

7. Conclusion

Michael of Ephesus proves to be a more original thinker in his work on the *De memoria* than most of his fellow Byzantine scholars. He notices the problems that arise from the text and distances himself from the word of Aristotle when he judges the views of the Philosopher incomplete or unsatisfactory. What is more, he presents a broader account of memory and recollection: he remarks on memory's active aspect when we recall what is stored, and he attempts to explain clearly what recollection is and what its physiological mechanism is. In other words, his interpretation improves those aspects of memory that have been generally considered by contemporary scholars as the weak points of the Aristotelian account. Sophonias, Michael's first successor and the one most influenced by him, transformed Michael's commentary into a paraphrase. He endorsed many of the readings suggested by Michael along with his main views about memory and recollection, but he did not follow his interpretation

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3. *In Aristotelis De caelo Commentary*, CAB 7, ed. by Ioannis Telelis (Athens: Academy of Athens, 2016); *Georgios Pachymeres, Philosophia Book 5. Commentary on Aristotle's Meteorologica*, CAB 6, ed. by Ioannis Telelis (Athens: Academy of Athens, 2012); *Georgios Pachymeres, Philosophia Buch 6. Kommentar zu De partibus animalium des Aristoteles*, CAB 4, ed. by Eleni Pappa (Athens: Academy of Athens, 2008); *Georgios Pachymeres, Philosophia Buch 10. Kommentar zur Metaphysik des Aristoteles*, CAB 2, ed. by Eleni Pappa (Athens: Academy of Athens, 2002); *Γεώργιος Παχυμέρης, Φιλοσοφία: Βιβλίον Ἐνδέκατον, Τὰ Ἠθικά, ἤτοι τὰ Νικομάχεια*, CAB 3, ed. by Konstantinos Oikonomakos (Athens: Academy of Athens, 2005).

96 Bloch, *Aristotle on Memory*, p. 15. Bloch used Pachymeres' autograph manuscript Berlin, Hamilton 512.

97 For the manuscript tradition of Pachymeres' *Philosophia* see Dieter Harlfinger, *Die Textgeschichte der Pseudo-Aristotelischen Schrift ΠΕΡΙ ΑΤΟΜΩΝ ΓΡΑΜΜΩΝ: Ein kodikologisch-kulturgeschichtlicher Beitrag zur Klärung der Überlieferungsverhältnisse im Corpus Aristotelicum* (Amsterdam: Hakkert, 1971), pp. 357–60.

98 See Christina Prapa, review of Ioannis Telelis (ed.), *Georgios Pachymeres, Philosophia Book 3. In Aristotelis De caelo Commentary* (2016), *Κριτικά*, 2017–10, http://www.philosophica.gr/critica/2017–10.html, 2.

99 The *editio princeps* of book seven of *Philosophia* for the series *Commentaria in Aristotelem Byzantina* (CAB) is currently being prepared for publication by Christina Prapa and it will definitely be a valuable aid to the better understanding of the subject.

in a consistent manner. He combined Michaelian material with material drawn from other commentaries and for this reason his paraphrase is often inconsistent. Similarly, the works by Metochites and Scholarios are also influenced by Michael's commentary, but his original interpretations, although present, are even less clear in their paraphrases.

In general, within the genre of paraphrase, many details of the commentary are lost and it turns out that the Byzantine paraphrasts could not always appreciate the scope of Michael's alterations. It was this insufficient presentation of Michael's account in the tradition that follows him, rather than a lack of novel insights, that caused his commentary to be deemed unoriginal.[100]

100 The work for this paper was conducted as part of my research for the FNS (Fonds National Swiss) project Theories of Cognition in the Aristotelian Commentators, directed by Katerina Ierodiakonou.

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